SEDENTARY GAMES OF INDIA

Edited by

NIRBED RAY
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THE ASIATIC SOCIETY
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With an Introduction by
IRVING L. FINKEL

THE ASIATIC SOCIETY

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Edited by
Nirbed Ray & Amitabha Ghosh

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FOREWORD TO THE SECOND EDITION

While I have committed myself to undertake this perfunctory assignment of writing a Foreword to the second edition of the title being published by the Society, I am not quite sure, imaginatively speaking, as to the academic legitimacy of the rules of the game in hand. The surviving editor of the original two member team, Sri Nirbed Roy, an old friend and colleague of mine, justified it by adding a few new chapters after nearly two decades on to the original print of 1999 including an elaboration on their first Preface of the book. The general introduction of an acclaimed scholar, Irving L. Finkel, remaining constant the compilation takes a new look. I had, therefore, no choice than to indulge myself to be engaged with little extrapolation over the given text.

A cursory glance into the original 26 articles and later additions collected from the published papers in Asiatick Researches and Journal of the Asiatic Society would lead the readers to situate different types of sedentary games, as incorporated in the compilation, on a physical space. One can easily discern, that, by and large, two groups of geographical terrains have been substantially touched. One, the eastern parts of India including north-east India has been covered, i.e. Bengal, Bihar, Orissa (Now Odisha) and part of Assam (which now belongs to the state of Meghalaya); and two, the northern parts of India (mainly, U.P. and Punjab). This apart incidental mention has been made on Central India, Maharashtra and Burma (now Mayanmar). The southern parts of India remains marked with their conspicuous absence. A student of history might speculatively knock his enquiry down into the possible context of its socio-political spectrum, if at all it turns out to be useful. Juxtaposed with spatial cartography, we get a package of varieties of the so called sedentary games which the editors preferred to term as "cerebral in nature". Here also we can club two kinds of constellations – one is singularly dominated by the game of 'chess' and the other is a mixed up category of differentials. While the 'chess' appears to be identified with both indigenity which is localized and sophistry which is contextually deeper and wider, 'pachesi' or 'pretoa' or 'sat-gharoa' appear embedded more in a local tradition. It may perhaps be probed by future researchers to what extent there is communicable articulation between these two levels of cultures in their evolutionary perspective.

Finally, in such types of sedentary games, played by very limited number of players, no matter whether they belong to the gentry or peasantry, there is probably an assumed universe of immediate duality reflecting an element of power subsumed under a given structure of equality of opportunity, but ultimately ending up in an unequal superiority/inferiority status by way of winning or losing the probability of a foreseeable future in all matters of life. It is amazingly coincidental that in the design of a majority of such sedentary games a rectangular structure emerges repetitively with some kind of perceived mathematical calculations of score value. One wonders how a deep perceptive development took place in the guise of a game, not requiring a physical movement but heavily dependent upon increasing rise of intellectual command.

I sincerely wish the book to be taken seriously by the scholars in this particular field of study.

Kolkata
6th March 2019

S. B. Chakrabarti
General Secretary

PREFACE TO THE SECOND EDITION

In 1763, at the age of 17, William Jones wrote a poem '*Caissa*', inspired by Marco Girolemo Vida, an Italian humanist, priest and poet who had written a long poem '*Scacchio Ludus*' in 1527. *Scacchio Ludus* was a didactic verse and the spirit of renaissance was apparent in the writing.

Scachhio Ludus or 'The Game of Chess' was written in Latin, whereas Jones wrote his poem in English. In the poem, the nymph *Caissa* initially repelled the advances of *Mars*, the God of War. Declined and spumed, *Mars* asked for the help of the God of Sport, who created the game of Chess as a gift for *Mars* to win *Caissa's* favour, and finally *Mars* won her over with the game.

Caissa had since been characterised as the 'goddess' of chess, and her name had been used in several contexts in modem chess also.

Twenty years after, in October 1783, Sir William Jones joined the then Calcutta Supreme Court as a Puisne Judge, and founded The Asiatic Society in Calcutta almost simultaneously at a meeting of thirty Englishmen at the Grand Jury Room of The Court. The foundation day of the Society was marked on the 15th day of January, 1784. Jones set the objective of the Society in his discourse delivered on that day. He said in his lecture, 'If now it be asked,what are the intended objects of our enquiries within these spacious limits, we answer, MAN and NATURE; whatever is performed by man, or produced by nature.' He also added, 'To this you will add researches into their agriculture, manufacture and trade; and, whilst you enquire into their music, architecture, painting and poetry, will not neglect those inferior arts, by which comforts, and even elegancies of social life are supplied and improved.'

And in 1790, the Second Volume of *The Asiatick Researches* brought out his memorable discourse — *On The Indian Game Of Chess*. The study in sedentary games began in modern India.

We had collected 26 articles from *The Asiatick Researches* and *The Journal of the Asiatic Society* to bring out a collection of these studies in the earlier edition of this book in 1999. The anthology was presented with a brilliant note of *Introduction* by Irving Finkel. The book immediately drew the attention of the scholars all around and the response was encouraging to the editors. But Amitabha Ghosh passed away only after few days of its publication. His untimely death came to me both as a personal loss, and also as a great loss to the field of game-studies.

During this period, I had to come across several books and references on the subject, starting from Huizinga's *Homo Ludens*, Roger Caillois's *Man, Play and Games* and their debates and other modern studies of the twentieth century ; but the most interesting readings were *The Ball-Bat Play* in *Shāhnāmā* by *Firdausi* and an elaborate description of the amusements of Emperor Akbar as described in *Āin-I-Ākbari* by *Abul-Fazl*. This description also included sedentary games being played by the Emperor (*Āin-I-Ākbari*, tr. H. Blochmann, Pp. 308-320).

I should not fail to mention at least two treatises written in Bengali in this connection. One is *Krīḍātaraṅga* by Shri Brajanath Mitra (Published from Kashi Mitra Lane, Battala, Calcutta), describing the modem sedentary games, mostly played by the women-folks and that came from different sources, not mentioned here. The booklet is almost one hundred and thirty years old. But the importance of this small book rested to its publication and its only copy was found in the British Library. The second work was an elaborate study of plays – both sedentary and otherwise in the area of Dhaka, Bikrampur, Bangladesh. When the research was made, it was undivided British India, and Shri Binodeswar Dasgupta sent his observations and reports to Bangiya Sahitya Parisat, Calcutta. The article was published in 1907 under title *Bikrampur Anchaler Khelar Bibaran* (1314 BS, 2nd *Chaitra, Bangiya Sahitya Parisat Patrika*, pp. 214-245). The article was a scholarly work, and Shri Dasgupta collected a number of local rhymes attached to these games, the detailed description of the games and their procedures.

My important addition to this volume is the deliberation of six scholars on *Daśāvatāra* cards – initiated by Professor Suniti Kumar Chatterji and followed by Mr. Percy Brown, Dr. S. P. Agharkar, Mr. O. C. Gangoly, Professor Chintaharan Chakravarti and Mr. H. Hobbs – made it a fruitful academic discussion at an ordinary monthly meeting of the Asiatic Society. The meeting was held on a Monday, the 6th July of 1937. The scholarships and refined observations on the *Daśāvatāra, Gañjifā* and other playing cards of India were discussed here with references. This was an excellent addition to this book.

I would like to express my thanks and gratitude to the General Secretary and the Council of the Asiatic Society for allowing me to bring out a new edition of this work in time, and I am indebted to the Publication Section for their help and cooperation.

9th January 2019
Kolkata

Nirbed Ray
Editor

FOREWORD TO THE FIRST EDITION

The Asiatic Society is the oldest academic institute of India which has a discontinuous history of more than two hundred years of existence. Although recent historical enquiries, particularly by Edward W. Said in his *Orientalism* and Martin Bernal in his *Black Athena* have caste shadows about the latent intentions of western scholars who engaged themselves in rediscovering a 'Hindu' India to legitimise their colonial conquest. We should, however, be quite careful before constructing a White-British monolith by confusing orientalist studies from "Orientalism".

Though it has been often quoted, the vision of Sir William Jones, the founder of the Society, cannot be better encapsulated in any other words than what he said in his inaugural address in 1784. He urged the members of the Asiatic Society to "examine their (Indians) improvements and methods in arithmetic and geometry, mensuration, mechanics, optics, astronomy and general physics... their skill in surgery and medicine, and their advancement, whatever be it in anatomy and chemistry...." Though recently there have been dissenting opinions about whether studies in history of sciences or technology are to be given prominence along with pursuits of the researches in classical languages, literature and philosophy, we should remember that for our founder, Sir William Jones, knowledge was never something which could be compartmentalised, "The bounds of its [The Asiatic Society's] investigation will be the geographical limits of Asia and within these limits its enquiries will be extended to whatever is performed by man or produced by nature."

The present publication will further reaffirm the wide spectrum of enquiry initiated by Sir William. I am informed that Jones from his college days was attracted by the charm of the game of chess and even wrote an epic poem about it which remains unpublished. However, his article on the history of the Indian game of chess, reprinted in this volume, was a pioneering work which encouraged later day researchers to contribute to the journal of the Society articles about different indigenous sedentary games of India.

This volume, to the best of my knowledge, is the first of its kind in India, which attempts compilation of essential ingredients of social and cultural history as gleaned from traditional games of India. Some of these games are no longer played and only a few of them survive among the non-urban people. But the importance of studying

history of sedentary games along with the regional variations in the rules of these games are manifold. No one can deny that painting, music and games constitute the earliest manifestations of human civilisation. A seminal work in this field is *Africa Counts* by Claudia Zaslavsky. In this book the author has elucidated that the so-called 'savage' Africans innovated and engaged themselves in many kinds of sedentary games which involved many parameters of mathematical probability.

We are indebted to Dr. Irving Finkel, Asst. Keeper, Western Asiatic Antiquities, The British Museum, London for his erudite introduction emphasising the need of publication of a book like this. We had the good fortune of having both Dr. Finkel and his wife Joanna, a noted paper-conservator, in the precinct of our Society when they visited Calcutta and addressed the members of our Society.

The Asiatic Society has loving memories of long association with the editors of this book. Sri Amitabha Ghosh, Scientist, NISTADS (CSIR) played a key role when the one year certificate course on History of Science was introduced by the Society in 1996. Sri Nirbed Ray is our Publication Officer. Last but not the least, I express my thanks for the arduous work undertaken by the staff of our Publication and Library divisions, without which the book would never have met the requirements of an academic publication.

I sincerely believe that the publication of this book will catch attention of scholars from different disciplines, particularly those engaged in authropological research, and would encourage them to produce companion volumes on the subject.

30 April, 1999

Anil Kumar Sarkar
General Secretary

PREFACE TO THE FIRST EDITION

Sedentary Games of India is a collection of twenty-six articles and communications, which were originally published in different periodicals of The Asiatic Society, Calcutta, between 1790 and 1942. In addition, two important articles have been supplemented to this collection from other sources to make the volume more complete and exhaustive. These articles, compiled in a single volume will give us an idea about the contribution of India in this particular field of study during last three centuries. In last five decades, however, not a single article on sedentary game has come out in the *Journal of the Asiatic Society,* and except a few commendable works by C. Panduranga Bhatta, S. Wakankar and Krishnamurthy, Indian scholars have hardly taken any initiative to contribute to this field.

Early contributions of India to the study of board games, on the other hand, deserve special attention. Irving L. Finkel, Assistant keeper of British Museum and a distinguished scholar on board games has precisely described this role of Indian scholarship in his well-written Introduction to this book and also pointed out the scope of future research for our scholars in this particular field of study.

The articles compiled in this volume have dealt with,

(i) the genesis and the history of the games,
(ii) documentation of the board-plans and rules of the games,
(iii) comparative study of similar type of games being played at different areas in India or outside India,
(iv) on the modifications of the games resulting from different cultural contacts and their interactions, and
(v) inter-disciplinary studies.

Sedentary games are more cerebral in nature. They reflect as well as manifest the cultural identity and ethos of a group of people, their social, economic and political contacts with other ethnic group(s), us and their fundamental levels of intelligence. As will be seen in many articles of this book how the games have been modified as a result of cultural contacts and exodus of a group of people from one area to the other. Changes and modifications to a particular type of game are consequential to its travel through different socio-cultural layers of various groups and sub-groups. Even then, games usually maintain their secular nature and indifference to national and geographical boundaries.

To prepare this collection, primary care has been taken in selecting twenty-seven transactions from an author-catalogue of

about seven thousand entries. It seems to be difficult because the entries are made against the names of the authors and not under the subject-headings.

From last decade of the 18th century to this date, the evolutions in typography and diacritical marks have undergone many changes. Romanization of Classical Oriental languages also gone through several experiments. We have decided to standardise the fonts for general readability and uniformity but we have kept diacritical marks and phonetic signs unchanged as far as possible. Headings and sub-headings of the articles have been standardised and notes have been provided at the bottom of the pages for additional information whenever necessary. Spellings have been kept unchanged as far as possible. Only gross mistakes have been taken care of. Figures and illustrations have been redrawn for better reproduction.

The photograph of the *Daśāvatāra (Nṛsiṃhāvatāra) card* reproduced on the jacket of the book has been taken from the private collection of Sri Amitabha Ghosh.

We are grateful to the Asiatic Society and its General Secretary Professor Anil Kumar Sarkar for the publication of this book and also to Dr. Irving L. Finkel for his excellent *Introduction*.

We are thankful to Dr. Mitali Chatterjee of the Library of the Asiatic Society for helping us to prepare the *Index* to this book. Smt. Sujata Misra and Smt. Arati Chaudhuri deserve special mention for their kind assistance and cooperation in providing us with the reference books and hard copies from microfische.

We are also indebted to the staff of the Publication Division of the Asiatic Society for their help and cooperation in seeing the book through press. We are thankful to Arunima Printing Works for their dedicated service.

Calcutta
26th April, 1999

Editors

THE SEDENTARY GAMES OF INDIA : AN INTRODUCTION

IRVING L. FINKEL

PREFATORY REMARKS

The decision to reprint in a single volume these invaluable early papers on Indian board games will be welcomed by all who are interested in this fascinating and absorbing subject. India's role in the history of games can only be described as primary, and it is on re-reading these present studies, and thinking over the relatively little that has been written subsequently, that one realizes how much new research remains to be undertaken, and therefore how many discoveries might remain to be made.

There can be no doubt that the study of board games has but rarely, with few outstanding exceptions, received the attention that it can readily be shown to deserve. Few enough scholars, even in recent times, have fully grasped that the study and comparison of board games has relevance on many levels, contributing to history, anthropology, sociology, psychology and indeed other disciplines.[1]

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[1] The historian of this subject can hardly dispense with the early writings of the American anthropologist Stewart Culin, who was greatly concerned with Oriental games and their origin and development (Culin 1895, 1898 and 1907), although many of his theories have since proved to be improbable. The most serious attempt to survey board games as a whole, incorporating all that could then be said of Indian games, is undoubtedly Murray 1952. For those interested in Indian games, the excellent account published by H. Parker about Ceylonese materials provides a comparative model that still repays close study (Parker 1909: 569-621). A useful recent compendium of information and illustrations on the board games of the world is Lhôte 1994. In theoretical terms it is worth pointing out that more than one game can be played on a given board plan, and that accordingly the documentation of a game board in an archaeological or unexplained context does not of necessity imply the presence of a particular *game*.

Board games have peculiar qualities. One is that they are no respecters of political or military boundaries. Games travel freely from culture to culture, sometimes developing, or evolving, in the process. History demonstrates that attempts to outlaw or suppress particular games have characteristically met with failure; board games have a resolute life of their own, and they will survive on a plane that has nothing to do with prevailing circumstances, and is wholly independent of writing.

So it is that "good" games, those that meet a specific requirement, or in which the balance between luck and skill is finely adjusted, can last for quite extraordinary lengths of time.

One particular board game, whose history spans much of the ancient Middle Eastern and Asian worlds, and which has formed the subject of a recent investigation by the present writer, will serve to illustrate many of the preceding remarks.

A TEST CASE : THE ROYAL GAME OF UR

In the 1920's Sir Leonard Woolley, excavating at the famous

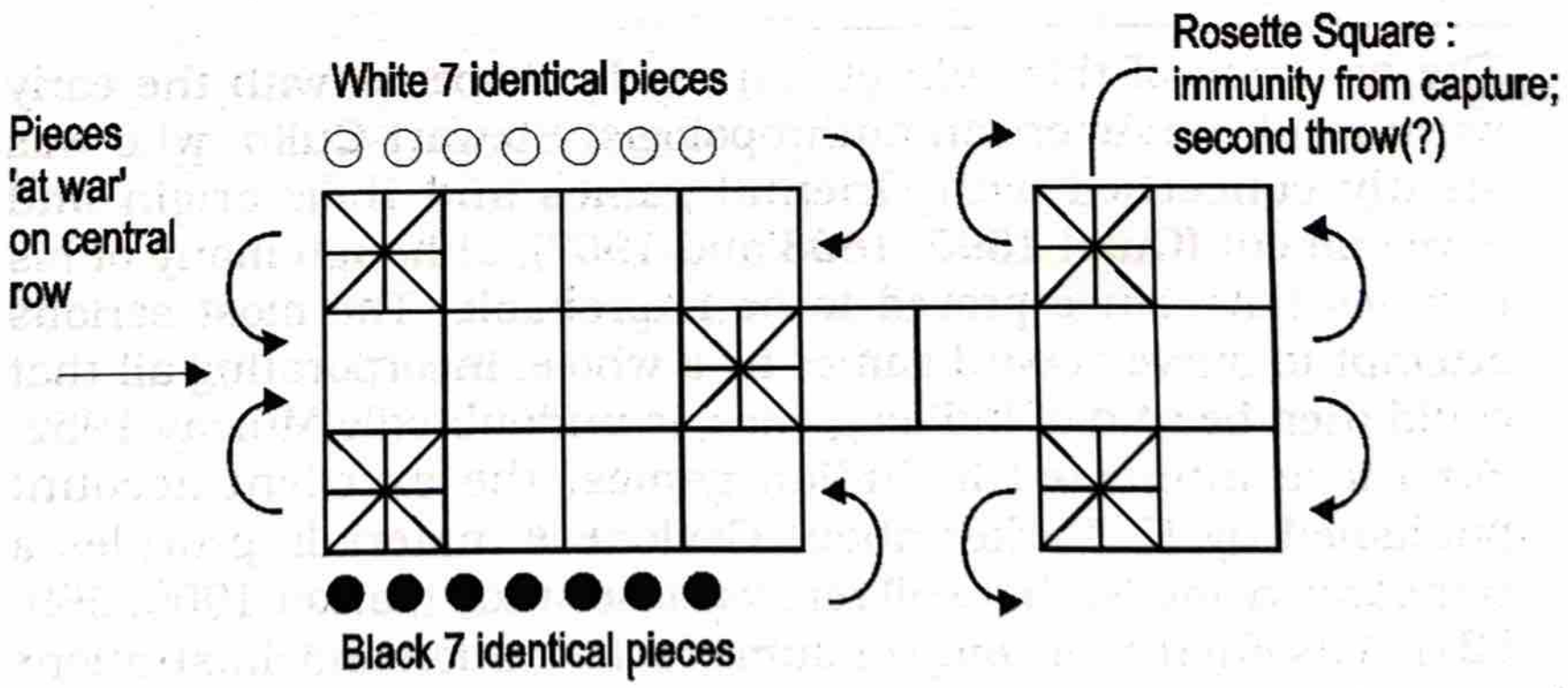

Fig. I. The original form of the Game of Twenty Squares as exemplified in the boards from the Royal Graves at Ur, about 2600 BC, showing the projected route of play.

city of Ur in southern Iraq, found a series of gaming-boards in a group of royal Sumerian graves.[2] Five such boards were discovered, while various sets of gaming pieces and dice were also recovered, some belonging to a board, others in isolation. The graves dated to about 2600 BC, and the finds, colourful and striking with their inlays of lapis lazuli and carnelian, rapidly became famous. Fig. I shows the typical form taken by these boards, with their plain round gaming pieces, seven a side, in the two colours needed for two players.

It was at once evident that this must be a race game for two players, who will have competed to be first to get their pieces round the track, while doing their best to displace the opponent's pieces en route.

Two types of dice were found by Woolley. The first, tetrahedral, are most unusual, and not by any means parallelled by other finds from ancient Mesopotamian sites. Two of the four corners of these tetrahedrons were inlaid with a coloured point : clearly the dice functioned by counting the number of such corners that fell uppermost on a given throw. The second type will be more familiar to Indian scholars : they were four-sided stick or long dice ancestral to the characteristic long dice to be found all over India today.[3]

Here then we can pinpoint this game, sometimes called the *Royal Game of Ur*, or the *Game of Twenty Squares*, as being popular in the upper echelons of Sumerian society in ancient Iraq in about 2600 BC.

Archaeology has recently extended this picture in a most intriguing way, for Italian archaeologists working at the cemetery site of Shahr-i Sokhta, Sistan in NE Iran, discovered one burial which included a board for the same game together with a bag containing dice and pieces (Piperno and Salvatore 1983; 1987).[4] Here the board itself, ingeniously carved out of

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[2] See Woolley 1934 : 274-279.

[3] Woolley did not realise that these small objects were dice. Ten specimens were found altogether, of which 3 were shell, 5 bone, and 2 mother-of-pearl. A variety of devices on the four faces served to indicate the numbers 1-4.

[4] The material in the bag consisted of the following: 10 triangular gaming pieces of wood; 3 squared cross-shaped gaming pieces of wood; 10 triangular gaming pieces with stepped sides, assorted sizes; 2 quadrangular gaming pieces of wood; 2 truncated cones of white variegated limestone and 4 long dice of wood.

wood, constitutes a snake's complex looped body and provides the same lay-out of 20 squares. Thus we are presented with what is either the same, or a closely-related game, being simultaneously popular in the middle of the third millennium BC in ancient Iraq and ancient Iran. In both cases, we may note, the game was of sufficient importance that it was considered essential equipment for the next life. These two archaeological discoveries may be taken as the starting point for the investigation.

Then there is the tantalising and suggestive evidence, more or less contemporaneous in date, resulting from archaeology in the Indus Valley. Mackay's follow-up excavation report from Mohenjo-Daro included a fragmentary three-row game-board, etched on a clay brick, which he discussed, with considerable vision, in terms of the then recently-discovered boards from Ur (Mackay 1937 I: 575-6).[5] There is insufficient preserved of this graffiti board to permit certainty, but there is certainly more than a mere possibility that when complete it showed a playing lay-out if not identical to, at least of the same family as the lay-out of the Ur and Shahr-i Sokhta boards. That there should be a connection between the Ur material and that from Mohenjo Daro need cause no surprise, in view of the well-established connections that have been established between the cultures in other areas.

In this connection the stick dice from Ur are probably deeply significant. To the present writer's knowledge no other dice of this type have been discovered in ancient Mesopotamian sites, where cubic dice or knucklebones are characteristically to be found instead. In view of the age-old presence of stick-dice in India from the period of the Indus Valley sites onwards this may prove to be a real indication that the game at Ur was imported from the East, via Iran, at

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[5] See Mackay 1937 II pl. CXLII : 82 The board was produced by scoring deep lines into the upper surface of a clay brick, which thus presumably once formed part of a pavement; the back was found to be coated with bitumen. The preserved area shows squares in three rows of at least three before the break, one of them cross-cut. The latter does not correspond in position to the cross-cut squares on the Ur boards, but of itself this is not necessarily so significant; regional variations are always to be expected.

some point in the late fourth/early third millennium BC, although it must be stressed that the boards from the royal graves themselves were certainly native Sumerian work.

On the other hand, the more recent find of an Uruk-period workshop at the site of Habuba Kabira in Syria must also be mentioned here, since several gaming boards produced by inlaying squares onto blocks of stone were discovered, although regrettably no example was complete, and it again remains unclear whether we are dealing with the same, or a closely-related game. In this case the archaeologist from Berlin, Frau Dr E. Strommenger, has attributed a date of about 3400 BC to this material.[6]

The Ur tetrahedral dice, as mentioned above, although echoing similarly-shaped objects from the Shahr i-Sokhta grave, likewise find no later counterpart in Mesopotamian archaeology, and again may be a pointer to the importing of the game to Sumer from outside.

If we are fortunate, of course, future archaeological finds will gradually provide additional fragments of the puzzle, and leave us less dependent on tentative theories constructed on the basis of a handful of isolated and widely-distributed finds.

Whatever may turn out to be its origin or direction of spread, there is no doubt that the Game of Twenty Squares, once established in Mesopotamian society, took permanent root. Archaeology demonstrates that the game was consistently popular right down to the end of the first millennium BC, since a whole array of boards, some well-fashioned by craftsmen, others impulsively scratched on a brick in a pavement, have come to light in a steady stream since Woolley's original discoveries. Furthermore, the game was adopted by many surrounding countries, so that in addition to specimens from Iran, boards totalling more than one hundred specimens have been excavated in Turkey, Syria, Jordan, Lebanon, Egypt, Cyprus and perhaps even Crete. In distribution and general role the Game of Twenty Squares was certainly the most popular game of the ancient Near Eastern world.

Around the turn of the second millennium BC the board for this game underwent a slight change, while maintaining the same number of squares; see Fig. II.

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[6] Strommenger 1980: 56; Abb. 46.

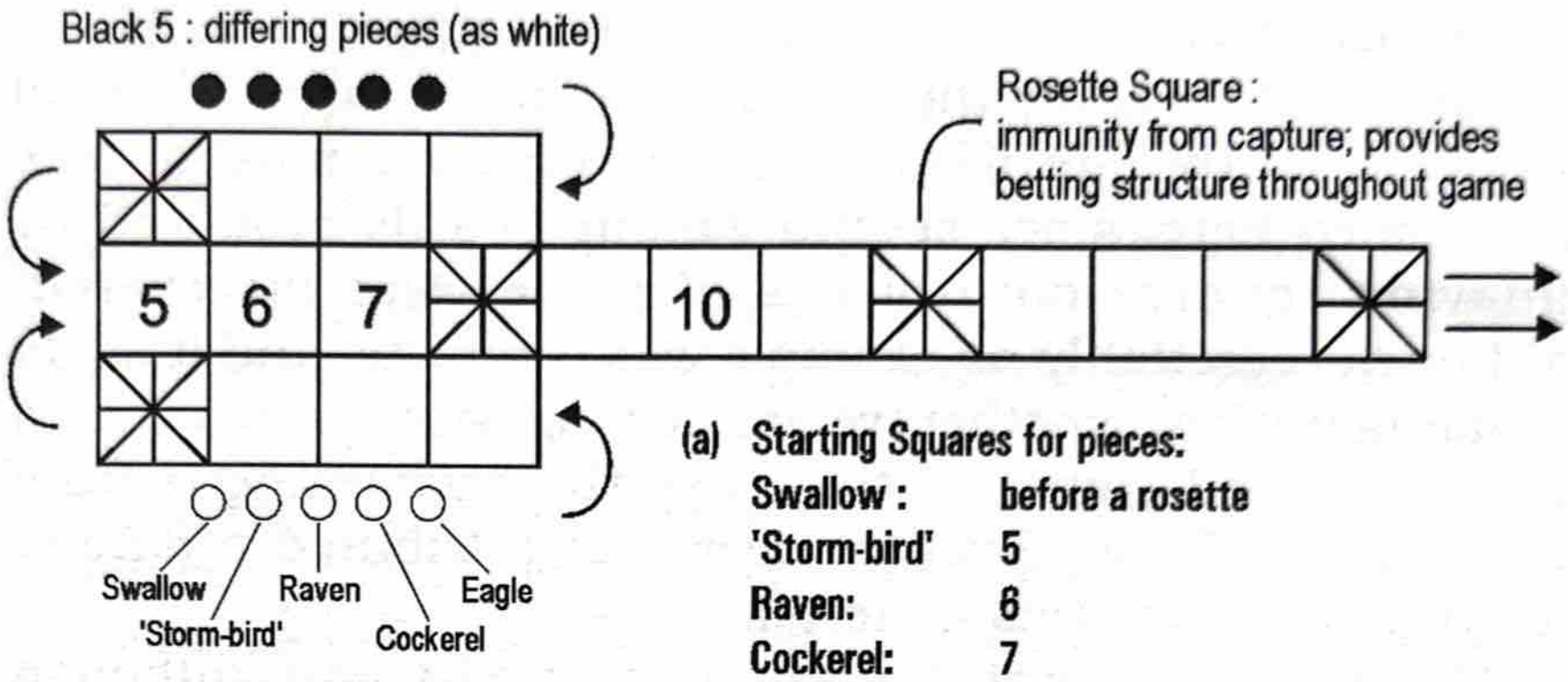

Fig. II. The evolved form of the Game of Twenty Squares as exemplified in boards datmg after 2000 BC, showing details of play extracted from the cuneiform rules tablet described below. of play extracted from the cuneiform rules tablet described below.

The likelihood is that this change reflected the intention of making the game more exciting, in that players would now be vulnerable to being knocked off while poised at the end of the central track just on the point of victory, while in the earlier form it is probable that each player would turn off on his own side at the end, and would have merely to wait until throwing the requisite number, being safe in this position from the enemy. It is certainly noteworthy that every example of this game that has turned up from about 2000 BC onwards exhibits this secondary, developed lay-out with its central aisle of twelve squares.

Starting with C.L. Woolley, many writers have speculated as to how the Game of Twenty Squares might have been

played, with a greater or lesser degree of plausibility. Significant discussions may be found in, for example, Murray 1952: 20-21; Bell 1960: 23-25. The matter was finally resolved some three years ago, however, when the present writer had the great good fortune to discover that one of the 130,000 cuneiform tablets from ancient Mesopotamia now housed in the Department of Western Asiatic Antiquities in the British Museum was inscribed with a version of the rules for this very game.

This remarkable clay tablet was dug up during the last century at the city of Babylon, and is dated in the colophon to November 3rd in the year 177-176 BC. Thus it was inscribed nearly two and a half thosand years after the Sumerians who played the game at the city of Ur, and it is couched in a tricky, almost cryptographic style in the Babylonian language. The scribe who wrote it down, however, one Iddin-Bel, was not the author of the text itself. He tells us that it was copied from another tablet, and thus there is no way for us at present to establish the exact date of composition, although it is surely within the second half of the first millennium BC. In any case, by any reckoning this rarest of cuneiform documents is the oldest set of rules for a board game ever discovered.

On side, the obverse, of this precious document itemizes the pieces, dice and special throws needed to play the game in the form popular at Babylon at this late period.[7] They do not describe the direction of play, or specify how a player was to win, since everybody naturally knew these things about their national game already. The scribe was concerned to communicate special gambling elements that had been imposed on an age-old and long familiar game to spice it up and give it new life. This is the version of the game that was played for wagers, and over strong drink.

In contrast to the early evidence presented by the Ur cemetery finds, the pieces prescribed in the rules have been reduced from seven to five. More significantly, in contrast to the earlier situation where each of the simple pieces was identical, each of the five pieces now differs from the others:

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[7] The reverse of the tablet contains other intriguing material, related to the rules, which implies that the board could also be used for a simple kind of fortune-telling; see Finkel 1995.

each took the form of a particular bird, and each, unparalleled for an ancient race game, had its own special properties. For dice the players used two knucklebones, one of a sheep (as is elsewhere commonplace), one of an ox (as is virtually unparalleled).

The rules tell us that a special throw was needed for each piece to start the game, and that the fortunes of each side depended directly on whether a given piece landed on a cross-cut square or not. For each there was a special benefit if it did manage to land on a marked square, with a corresponding penalty if a particular throw forced a player to move right over such a square without landing on it. It is probable that there was a pool of tokens into which each player placed an agreed deposit. The rules, with a minimum of scholarly interpretation, produce an exciting and rapidly-changing game. As the game progressed, if a piece could be manoeuvred into landing on a marked square, the player would collect the appropriate number of tokens, but he would be penalized by having to pay into the pool the corresponding number if forced to bypass such a square.

If one assumes that the pieces move in the direction indicated in Fig. II, these rules as recorded suffice to show how a simple race game, which must assuredly have been the original form, had evolved into a highly competitive, fast-changing and quite complex descendant.

It was shortly after deciphering this tablet in the British Museum that the present writer encountered a short report published by Israeli anthropologists concerning a season's work in Cochin, where they had been despatched by the Israel Museum to make records and collect materials from the communities of Jews who had lived there for so long, but who were fast dwindling in the face of emigration to Israel (Brafman 1985).

This article included a photograph (Brafman 1985:98) of a carved wooden game board with cowrie shells which, according to the caption, represented a "Men's game for Tisha Be'av," and which had been presented to the Israel Museum by Mr. and Mrs. Sattoo Koder, Cochin; see Fig. III.

This game board by no means represented a well-known type of Indian game. On the contrary, both in number of squares and lay-out it obviously corresponded very closely to

the Game of Twenty Squares known from the ancient Middle Eastern world as discussed above. Within the text of the article it was remarked that the rules could be learned from the elders of the group now in Israel.

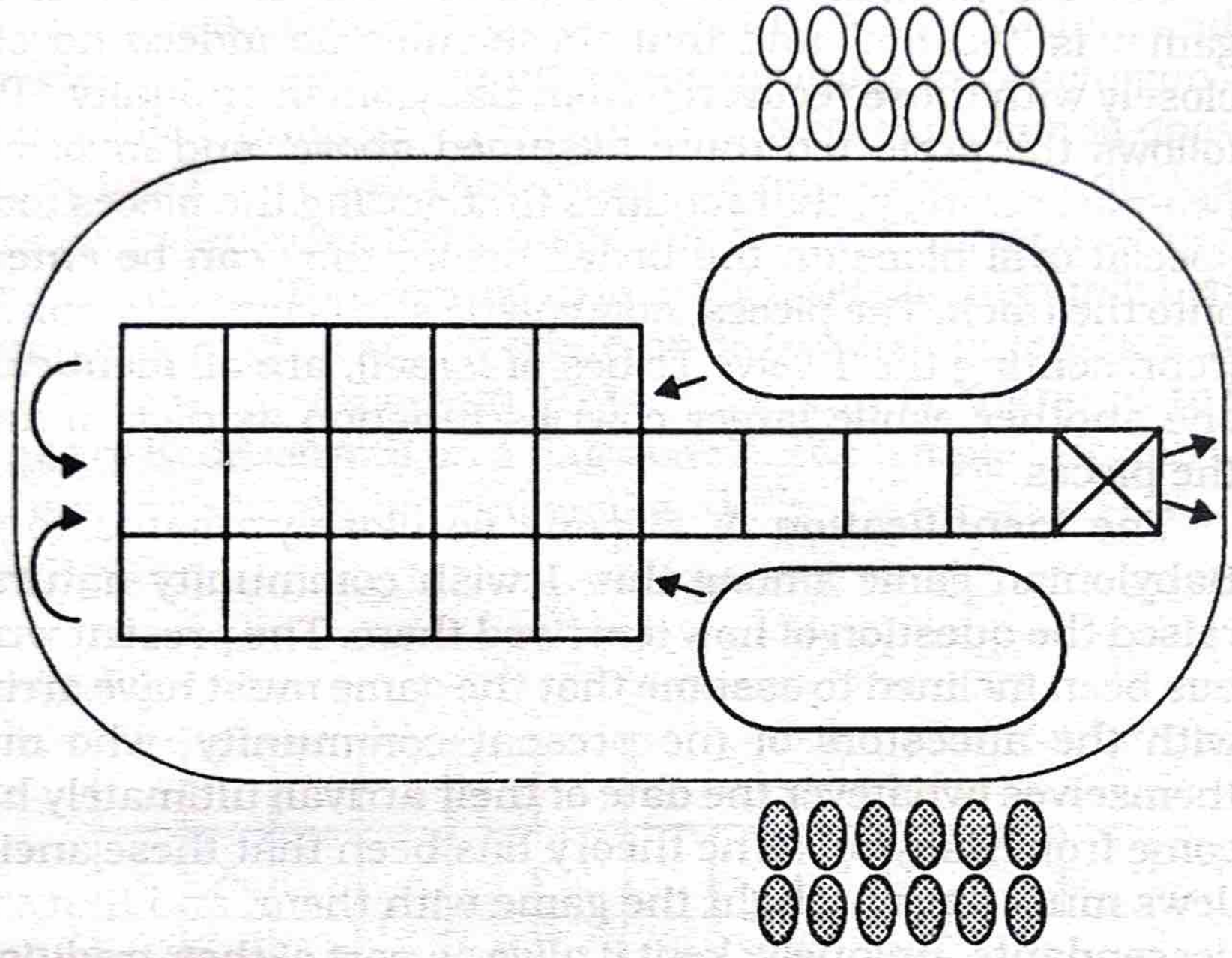

Fig. III. Diagram by A. Searight to show the details of the Cochini version of the game Aasha, from a board dating to about 1920 now in the Israel Museum, Jerusalem, showing the route of play. Note the location of the cross-cut square.

It thus became imperative to discover, if possible, the rules of this game as played among the Cochini Jews, to test whether there might be any connection with the ancient rules that had been worked out from the cuneiform tablet. The present writer thus drew up a lengthy questionaire concerning the Cochini board, and had the great benefit of securing the help of Deborah M. Lionarons of Jerusalem, who, armed with that document, visited the kibbutz in the north of Israel where many Cochinis had settled, in attempt to locate someone who might remember the rules. Before long she encountered Ruby Daniel, a retired schoolteacher who had often played the game

as a girl with her mother and aunts, and who had a very distinct memory of the rules and other details. This information has been shared with the present writer, and a full report on the whole of these materials is in an advanced state of preparation: see Daniel 1995: 162; Finkel forthcoming.

For the moment it may be noted that the name of the game is "Aasha," and that these rules do indeed dovetail closely with those recovered from Babylonian antiquity.[8] Play follows the projected route assumed above, and involves a two-part strategy, that requires first getting the pieces into a special oval place on the board before they can be entered onto the track. The pieces, now cowrie shells twelve in number (representing the Twelve Tribes of Israel), are all identical to one another, while larger cowries function as dice to move the pieces.

The identification of a game so closely related to the Babylonian game among this Jewish community naturally raised the question of how it arrived there. The present writer has been inclined to assume that the game must have arrived with the ancestors of the present community, who must themselves (whatever the date of their arrival) ultimately have come from Babylon.[9] The theory has been that these ancient Jews must have brought the game with them, and that their descendants, uniquely, kept it alive as part of their traditional inheritance, side by side with the Babylonian month names and other features.

The development of this appealing if not romantic theory has received something of a hiccup through the discovery that game boards of this specific lay-out do in fact occur elsewhere in India. One graffiti board recorded at the burning ghats at the Buddhist site of Nagarjunakonda in Andhra Pradesh by Krishna Murthy and published in an article on dice play (Krishna Murthy 1961: 4 and Sketch 3; cf. Bhatta

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[8] I am most grateful to Dr. G.M. Trivedi, Senior Linguist of the Anthropological Survey of India, Calcutta for the explanation that "Aasha", i.e. āsā, must correspond to Sanskrit pāsā = Telugu/ Tamil hāsā, "dice," showing the characteristic Dravidian Malayalam loss of the initial "h." Thus the Cochini name simply means "dice."

[9] For a recent survey of the history of the Jews of Cochin see Segal 1993.

1985: 72) proves to be an exact parallel. The ghats themselves are probably to be dated to the 3rd/4th century AD, but of course there is no way of knowing (as indeed there never is in such cases), when the plan for this game board might have been scratched on the steps. At any rate, the publication of this board has drastically altered the impression that the game was unknown in India beyond its occurrence in Cochin, and provides a salutory warning about jumping to conclusions too quickly. Of course, one example at Nagarjunakonda does not, of itself, rule out that the game did arrive in India via incoming wandering Babylonian Jews, but the present writer was somewhat disconcerted to identify a second unpublished example of such a board while on a trip to the temples at Bhubaneswar in Orissa in 1994. This is to be found at the temple of Kedāreśvara on a flagstone in the temple forecourt, and a sketch is reproduced as Fig. IV:[10]

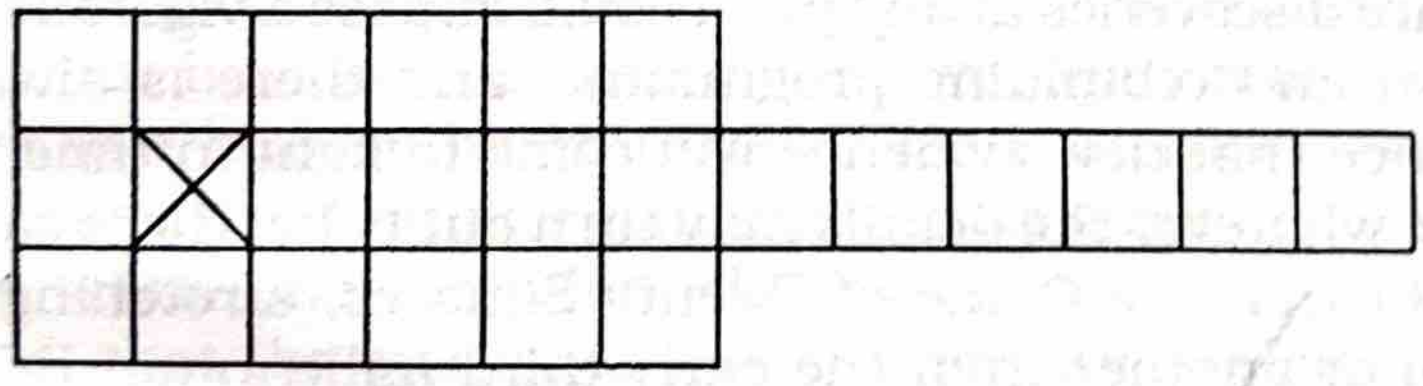

Fig. IV. Author's sketch of the graffiti gaming board from a flagstone in the courtyard to the Kedāreśvara temple, Bhubaneswar. Note that with this board an extra square has been added to the central aisle and the three blocks of squares, producing a total of 24 rather than 20 squares. This alteration does not, of course, materially affect the game itself. Again, note the location of the cross-cut square.

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[10] The temple itself was apparently founded in the eleventh century. As a matter of interest it may be recorded that one of the temple attendants, much perplexed at my fixed and absorbed interest in this design, on being asked what it represented, declared it to be a plan of the temple. This is of interest in that the same question

Thus it is hardly possible at this stage of things to establish the history of this game as it developed over three thousand years or more. It is possible, as we have seen, that it might have spread at, say, the end of the fourth millennium or the beginning of the third millennium from the Indus Valley via Iran to Iraq, and thence across the entire Midde Eastern world, in a process that would be a curious anticipation of the early history of chess. At the point when the game is more or less disappearing from the archaeological record, we may imagine that it came to be scooped up and carried from Babylon by Jewish refugees round the coasts to SW India, where it managed to survive in a virtual time-capsule down into modern times. Other occurrences of the board within India will have thus to be explained either as :

a) local survivals themselves from the original game reaching back to the third millennium BC, or
b) developments from the Cochin import, that came to take root in India at some point.

This is indeed but the most frail of working models, since future discoveries at any point could impose a vigorous tearing down and rebuilding programme, and there is always the chance that new evidence will come to light in time. At any rate, whatever the details may turn out to be, there can be no doubt that the Game of Twenty Squares, stretching in one form or another from the early third millennium BC to the end of the second millennium AD is the longest running board game in the history of the world.

INDIAN BOARD GAMES : PUBLICATIONS

The term "sedentary" to cover the variety of Indian board games is an admirable one. Definition and classification are always thorny questions, and never more so than with games: the simple use of "board" game as a general term runs into difficulties when applied to playing surfaces of cloth, and increasingly so when the reference is to games played in mere holes in the ground.

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addressed in many cases to similar helpful locals about other gameboard designs that were readily to be encountered otherwise invariably elicited the information that they represented games. This *might* indicate that the board at Orissa related to the Cochin board had not been used for play in a long while, although equally, on the other hand, it might not.

The classification of games is a matter with which board game historians have long wrestled. One system which has perhaps tended to predominate is that of H.J.R. Murray, articulated in Murray 1952, the fruit of many years' consideration of all the world's board games. Here he proposed:

1. Games of Alinement and Configuration
2. War Games
3. Hunt Games
4. Race Games
5. Mancala Games

Other have sought to adjust this framework (e.g. Bell 1960: de Voogt 1995: 9-15: Parlett forthcoming), but for our present purposes they will fit well enough.

India contributes importantly to all five of these categories, and the early papers collected here, reflecting detailed fieldwork on a geographical basis, do much to demonstrate the point. Nevertheless, when one considers the work that has been published on Indian board games since these original articles, the picture is very uneven, and different in emphasis. Most labour has been devoted to the investigation of literary sources that bear on board games. This is a crucial area of enquiry, and one that has continued to yield results.

It is when one considers the question of subsequent fieldwork that the picture is less satisfactory. We may take the case of Pachisi, or Chaupat, spontaneously described by Edward Falkener in his intriguing volume in 1892 as the "national game of India."

Important for Pachisi historians is the early evidence from Abu Fazl, who records the game as having been played in India prior to the arrival of the Moghuls; see Brown 1964:32. The first description of the game by an outsider was given in the late seventeenth century by Thomas Hyde, Professor of Hebrew and Arabic in the University of Oxford and interpreter to the Crown, who illustrated a "Tchûpur" board with dice and pieces that he had purchased from an Indian sailor. He had been unable, he remarks, to discover how the game was played, leaving that question for future enquirers.

As it turns out, most writings on Pachisi subsequent to Hyde still predate the studies published in this volume; Temple's succint account of 1884 has hardly been replaced,

and it is rare indeed to find discussions of much depth that have been published since. Much energy has been devoted to discussion of whether Pachisi is or is not related to the Mexican game of Patolli (see Tylor 1878; 1896; Smith 1933, and Kendall 1980); today the verdict is generally that it is not. The two articles of W. Norman Brown, for example (Brown 1964 and Brown 1968), add virtually nothing that is new to Indian scholarship, beyond pointing briefly to investigations in an altogether tangential direction, namely what happened to the game after it reached America from India.

Such secondary investigations, we may note, can be a rich field for the board-game historian. American Pachisi developments have recently been investigated in four excellent but hard-to-procure articles by Wayne Saunders (Saunders 1994-5), with the help of Kishor Gordhandas of Bombay. The game seems to have surfaced in America in about 1867, where it was soon successfully marketed by Selchow and Richter as "Parcheesi The Great Backgammon Game of India." An alternative American name is "Chessindia." In England, on the other hand, Pachisi had already been registered by 1863 by Jaques and Sons under the name of "Patchesi", soon to be renamed "Ludo" (Latin "I play"!), under which handle it has been known ever since.

The game has gone from strength to strength, and Pachisi derivatives can be documented across Europe, and elsewhere; Glonegger 1988: 14-17 documents the following, where all trace of its august ancestry in India has virtually disappeared for ever: "Mensch Ärgere dich nicht," "Eile mit Weile," "Der Weg zur Herberge," "Mit Bedacht zum Ziel," and "Immer Vorwärts" (Germany); "Parchis" (Spain); "Le Jeu de Dada," or "Petits Chevaux" (France), "Chi va piano va sano," or "Non t'arrabiare" (Italy) and the like. Others can be adduced, of which the most intriguing is perhaps Polish "Chinczyk," lit. "Chinaman," where the pieces are indeed often diminutive chinamen in characteristic hats, the boards bedecked with dragons, and where uniquely some echo of an "Eastern" (although mistaken) origin seems to be preserved.

This sort of investigation can still come up with large-scale surprises. Murray's careful documentation of the spread of Pachisi itemizes a single case in the Arab world, among the Arabs of Palestine under the name "Barjis," see Murray 1952:

136, 6.4.12. Four brand-new sets for the game have recently been acquired for the British Museum in Aleppo, Syria. Here it turns out the game is for women only, and played by two players rather than four. One side's pieces have horses' heads, probably reflecting French influence at some point, but the scores remarkably enough are counted in Persian rather than Arabic numbers,[11] no doubt pointing clearly to the route by which the game itself arrived, although the date of that arrival is entirely open to speculation. Investigations elsewhere in the Arab world would thus no doubt produce much that is of interest to the historian of this far-reaching cruciform game from India.

The latterday history of Indian gyan caupad, Snakes and Ladders, is in some measure comparable, in that a complex and intricate game of moral teaching devolved in English commercial hands into a childishly simple race game that was first marketed by F.H. Ayres in 1892 (see especially Topsfield 1985). It is an interesting question why Snakes and Ladders, in marked contrast to Pachisi, though deeply embedded in English nursery culture to the present day, has not found a secure position among the games of the world, and is hardly played, as far as the writer has been able to ascertain, anywhere else at all. Why should this be ?

The anthropologist too will pause for a minute to reflect on the irony of the fact that within recent decades both Pachisi and Snakes and Ladders have been re-imported back into India in these watered-down and trivialized English versions. The curious investigator will have no trouble in finding Ludo keenly played on the streets of Calcutta, for example, but he

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[11] These boards were acquired by Dr St John Simpson, who writes as follows: "referred to as "*b' rsis*" and achnowledged as an Ottoman introduction. The cowries are called "*wada*," throws are called "*yak*" (one), "*dw*" (two), "*ca*" (three), "*ghar*" (four), "*bang*" (five), and "*shesh*" (six). The game is played only in the home and usually by women (personal communication, Aleppo, 13/6/96), although at least one man in Damascus appeared to know how to play. New embroidered cloth boards almost invariably seen on sale in shops specialising in water-pipe apparatus in Damascus and Aleppo, said to be made in both these cities, the one exception being in a small shop selling cheap and handy items such as knives, plastic goods and folding plastic chess-boards. They are certainly not aimed at the tourist market."

might look long and hard to witness a game of venerable Chaupat.[12]

INDIAN BOARD GAMES : FUTURE RESEARCH AND FIELD WORK

It is evident that written sources, printed and manuscript, will always have endless riches to contribute to the study of Indian board games; see for example Bhatta 1995; Bock-Raming 1986; Wakankar 1986. One particular significant resource yet to be fully exploited is represented by the encyclopedic productions of the court of Raja Krishnaraja Wodeyar, alluded to in Topsfield 1985: 212 fn. 35.[13] Another rich source that can provide illuminating details about certain games, principally perhaps Chess and Pachisi, are paintings and other illustrations. At this point, however, the most significant need with regard to future research, however, must be field work, the detailing by enquiry on the ground what games are played where, and how, and by whom.

One is hard put to document many investigations of this sort that have been carried out since the papers collected here were first published. Outstanding perhaps is Peter Claus' detailed analysis of the significance of cenne mane, the Tulu version of mancala played in Tulunad; see Claus 1985.[14] This article indeed indicates what persistent enquiry and

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[12] Contrast Falkener 1892: 258: 'The combatants breathe hatred and vengeance against each other: the throws of the dice are accompanied with tremendous noise, and the sounds of "*Kache-Baro*" and "*Karo-Pauch*" are heard from a considerable distance. It is altogether a lively scene.... [quoted from the Calcutta Review vol. XV (1851)].

[13] The Department of Oriental Antiquities in the British Museum houses a group of some twenty-three copper plates engraved with extracts from this encyclopedic undertaking, including long Kannada texts and many diagrams (OA. 1996.5-20. 1-23). Closely related manuscript books in Sanskrit, written in Telugu script, and emanating from the same source were sold recently at Christie's "Visions of India" Sale in London (Wednesday June 5th 1996, lots 166-167). Similar materials are incorporated in the Krīḍākauśalya of Harikṛṣṇa, written in 1871, of which extracts are given in Bock-Raming 1995: 116-123.

[14] Claus mentions (Claus 1985: 266 fn. 2) that "over the past years I have collected reports on the occurrence of mancala from folklorists in several regions of South India," and refers (*ibid.* 267, fn. 3) to material on the game gathered by Dr Mark Nichter. Hopefully further publications based on this research will appear.

ccnsideration can reveal, but this one study must be the very uppermost tip of the iceberg with regard to Indian mancala.

Hardly anything more has been reported on this important game in India to match the very serious and laborious investigations devoted to African and other versions of mancala that have appeared over the last ten or fifteen years. What is needed for India are investigations along the lines of the admirable researches recently carried out in Yunnan province in China by Vernon Eagle (Eagle 1985). Here the most painstaking and detailed fieldwork, with careful interviews and patient step-by-step enquiry exacted quite remarkable results. Adjacent villages were shown to play entirely different rules, using entirely different terms. An investigation of mancala in India along similar lines would undoubtedly produce comparable results, results with the richest of implications, social, historical and anthropological, and the same would obviously be equally true of the renewed investigation of Indian sedentary games at large.

At the time of writing there is some attempt underway to address this problem, in the form of an "Anthropological Investigation of the Board games of India." This investigation is to be incorporated into the general researches carried out within the country by the Anthropological Survey of India, in a joint venture with the British Museum in London. The plan is that any investigations carried out by the Anthropological Survey should also incorporate a look at what local games are played, or have been played within living memory. Such a project would attempt documentation in the form of notes and interviews, photographs and the collection of boards and equipment, in the hope that gradually the occurrence of individual games will come to be recorded in a central register. This in turn can lead to specific investigations of specific games by individual equirers, focussing either on individual games, or specific geographical areas. As a model publication to which one might aspire one needs only to consider Culin's mammoth production of 1907.

To approach so vast a topic requires the greatest cooperation between scholars and investigators, a sharing of hard-won information. If we but follow the lead of the pioneering writers collected here, and extend their primary investigations over as broad a spectrum as possible, it will

follow that the sedentary folk games of India, many of which must stretch back into the remotest of times but are now poised on the brink of extinction, can be preserved and recorded for present analysis and future consideration.

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ON THE INDIAN GAME OF CHESS*

WILLIAM JONES

If evidence be required to prove that *chess* was invented by the *Hindus*, we may be satisfied with the testimony of the *Persians;* who, though as much inclined as other nations to appropriate the ingenious inventions of a foreign people, unanimously agree, that the game was imported from the west of *India*, together with the charming fables of *VISHNUSARMAN*, in the sixth century of our era : it seems to have been immemorially known in *Hindustan* by the name of *Chaturanga*, that is, the four *anga's*, or *members*, of an army, which are said in the *Amaracósha* to be *hasty-aśwarat'hapádátam*, or *elephants, horses, chariots*, and *foot-soldiers;* and, in this sense, the word is frequently used by Epick poets in their descriptions of real armies. By a natural corruption of the pure *Sanscrit* word, it was changed by the old *Persians* into *Chatrang*, but the *Arabs*, who soon after took possession of their country, had neither the initial nor final letter of that word in their alphabet, and consequently altered it further into *Shatranj*, which found its way presently into the modern *Persian*, and at length into the dialects of *India*, where the true derivation of the name is known only to the learned : thus has a very significant word in the sacred language of the *Bráhmaṇas* been transformed by successive changes into *axedrez, scacchi, échecs, chess*, and by a whimsical concurrence of circumstances, given birth to the English word *check*, and even a name to the *Exchequer* of *Great Britain*. The beautiful simplicity and extreme perfection of the game, as it is commonly played in *Europe* and *Asia*, convince me, that it was invented by one effort of some great genius; not completed by gradual improvements, but formed,

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* Published in *The Asiatick Researches*, Vol. II, pp. 159-165, 1790 under the title *ON THE INDIAN GAME OF CHESS By the PRESIDENT.* This was the Seventh Annual deliberation of Sir William Jones as the President of the Asiatic Society of Bengal..

to use the phrase of *Italian* criticks, *by the first intention;* yet of this simple game, so exquisitely contrived, and so certainly invented in *India*, I cannot find any account in the classical writings of the *Bráhmaṇas*. It is, indeed, confidently asserted, that *Sanscrit* books on Chess exist in this country, and, if they can be procured at *Banáres*, they will assuredly be sent to us: at present I can only exhibit a description of a very ancient *Indian* game of the same kind; but more complex, and, in my opinion, more modern, than the simple Chess of the *Persians*. This game is also called *Chaturanga*, but, more frequently *Chatúrájì*, or the *four Kings*, since it is played by four persons representing as many princes, two allied armies combating on each side : the description is taken from the *Bhawishya Puráṇ*, in which *YUDHISHT'HIR*, is represented conversing with *VYA'SA*, who explains at the king's request the form of the fictitious warfare and the principal rules of it: "having marked *eight* squares on all sides, says the Sage, place the *red* army to the east, the *green* to the south, the *yellow* to the west, and the *black* to the north : let the *elephant* stand on the left of the *king* : next to him, the *horse;* then, the *boat;* and, before them all, four *foot-soldiers;* but the *boat* must be placed in the *angle of the board*." From this passage it clearly appears, that an army, with its four *anga's*, must be placed on each side of the board, since an *elephant* could not stand, in any other position, on the *left* hand of each *king;* and *RÁDHĀCÁṆT* informed me, that the board consisted, like ours, of *sixty-four squares*, half of them occupied by the forces, and half, vacant : he added, that this game is mentioned in the oldest *law-books*, and that it was invented by the wife of *RÁVAṆ*, king of *Lancá*, in order to amuse him with an image of war, while his metropolis was closely besieged by *RÁMA* in the second age of the world. He had not heard the story told by *FIRDAUSI* near the close of the *Sháhnámah*, and it was probably carried into *Persia* from *Cányacuvja* by *BORZU*, the *favourite physician*, thence called *Vaidyapriya*, of the great *ANÚSHIRAVÁN*; but he said, that the *Bráhmans* of *Gaur*, or *Bengal*, were once celebrated for superior skill in the game, and that his father, together with his spiritual preceptor *JAGANNÁTH*, now living at *Tribéni*, had instructed two young *Bráhmans* in all the rules of it, and had sent them to *Jayanagar* at the request of the late *Rájà*,

who had liberally rewarded them. A *ship*, or *boat*, is substituted, we see, in this complex game for the *rat'h*, or armed *chariot*, which the *Bengalese* pronounce *rot'h*, and which the *Persians* changed into *rokh*, whence came the *rook* of some *European* nations; as the *vierge* and *fol* of the *French* are supposed to be corruptions of *ferz* and *fil*, *the prime minister* and *elephant* of the *Persians* and *Arabs* : it were vain to seek an etymology of the word *rook* in the modern *Persian* language; for, in all the passages extracted from *FIRDAUSI* and *JÁMI*, where *rokh* is conceived to mean a *hero*, or a *fabulous bird*, it signifies, I believe, no more than *a cheek* or *a face;* as in the following description of a procession in *Egypt:* "when a thousand youths, like cypresses, box-trees, and sirs, with locks as fragrant, cheeks as fair, and bosoms as delicate, as lilies of the valley, were marching gracefully along, thou wouldst have said, that the new spring was *turning his face* (not, as *HYDE* translates the words, *carried on rokhs)* from station to station;" and, as to the *battle of the duwázdeh rokh*, which *D'HERBELOT* supposes to mean *douze preux chevaliers*, I am strongly inclined to think, that the phrase only signifies a combat of *twelve persons face to face*, or fix on a side. I cannot agree with my friend *RÁDHÁCÁNT*, that a *ship* is properly introduced in this imaginary warfare instead of a *chariot*, in which the old *Indian* warriors constantly fought; for, though *the king* might be supposed to sit in *a car*, so that the four *anga's* would be complete, and though it may often be necessary in a real campaign to pass rivers or lakes, yet no river is marked on *the Indian*, as it is on *the Chinese, chess-board*, and the intermixture of ships with horses, elephants, and infantry embattled on a plain, is an absurdity not to be defended. The use of *dice* may, perhaps, be justified in a representation of war, in which *fortune* has unquestionably a great share, but it seems to exclude chess from the rank, which has been assigned to it, among the sciences, and to give the game before us the appearance of *whist*, except that pieces are used openly, instead of *cards* which are held concealed: nevertheless we find, that the moves in the game described by *VYÁSA* were to a certain degree regulated by *chance;* for he proceeds to tell his *royal pupil*, that "if, *cinque* be thrown, the *king* or a *pawn* must be moved; if *quatre*, the *elephant;* it *trois*, the *horse;* and if *deux*, the *boat.*"

He then proceeds to the moves : "the *king* passes freely on all sides but over *one* square only; and with the same limitation, the *pawn* moves, but he advances straight forward, and kills his enemy through an angle; *the elephant* marches in all directions, as far as his driver pleases; the *horse* runs obliquely, traversing three squares; and the *ship* goes over two squares diagonally." The elephant, we find, has the powers of our *queen*, as we are pleased to call the *minister*, or *general*, of the *Persians*, and the *ship* has the motion of the piece, to which we give the unaccountable appellation of *bishop*, but with a restriction, which must greatly lessen his value.

The bard next exhibits a few general rules and superficial directions for the conduct of the game : "the *pawns* and the *ship* both kill and may be voluntarily killed; while the *king*, the *elephant*, and the *horse* may slay the foe, but cannot expose themselves to be slain. Let each player preserve his own forces with extreme care, securing his *king* above all, and not sacrificing a superior, to keep an inferior, piece." Here the commentator on the *Purán* observes, that, the *horse*, who has the choice of eight moves from any central position, must be preferred to the *ship*, who has only the choice of *four*; but this argument would not have equal weight in the common game, where the *bishop* and *tower* command a whole line, and where a knight is always of less value than a tower in action, or the bishop of that side, on which the attack is begun. "It is by the overbearing power of the *elephant*, that the king fights boldly; let the whole army, therefore, be abandoned, in order to secure the *elephant* : the king must never place one elephant before another, according to the rule of *GÓTAMA*, unless he be compelled by want of room, for he would thus commit a dangerous fault; and, if he can slay one of two hostile elephants, he must destroy that on his left hand." The last rule is extremely obscure; but, as GÓTAMA was an illustrious lawyer and philosopher, he would not have condescended to leave directions for the *game of Chaturanga*, if it had not been held in great estimation by the ancient sages of *India*.

All that remains of the passage, which was copied for me by *RÁDHÁCÁNT* and explained by him, relates to the several modes, in which a partial success or complete victory may be

obtained by any one of the four players; for we shall see, that, as if a dispute had arisen between two allies, one of the kings may assume the command of all the forces, and aim at separate conquest. First; "When any one king has placed himself on the square of another king, which advantage is called *Sinhásana*, or the *throne*, he wins a *stake*; which is doubled, if he kill the adverse monarch, when he seizes his place; and, if he can seat himself on the throne of his ally, he takes the command of the whole army." Secondly; "If he can occupy successively the thrones of all three *princes*, he obtains the victory, which is named *Chaturáji*, and, the stake is doubled, if he kill the last of the three, just before he takes possession of his throne; but, if he kill him on his throne, the stake is quadrupled". Thus, as the commentator remarks, in a real warfare, a king may be considered as victorious, when he seizes the metropolis of his adversary; but, if he can destroy his foe, he displays greater heroism, and relieves his people from any further solicitude. "Both in gaining the *Sinhásana* and the *Chatúráji*, says *VYÁSA*, the king must be supported by the *elephants* or by all the forces united." Thirdly; "When one player has his own king on the board, but the king of his partner has been taken, he may replace his captive ally, if he can seize both the adverse kings; or, if he cannot effect their capture, he may exchange his king for one of them, against the general rule, and thus redeem the allied prince, who will supply his place." This advantage has the name of *Nrīpácrishta*, or *recovered by the king;* and the *Naucácrishta* seems to be analogous to it, but confined to the case of *ships*. Fourthly; "If a pawn can march to any square on the opposite extremity of the board, except that of the king, or that of the ship, he assumes whatever power belonged to that square; and this promotion is called *Shatpada*, or *the six strides*." Here we find the rule, with a singular exception, concerning the advancement of *pawns*, which often occasions a most interesting struggle at our common chess, and which has furnished the poets and moralists of *Arabia* and *Persia* with many lively reflections on human life. It appears, that "this privilege of *Shatpada* was not allowable, in the opinion of *GÓTAMA*, when a player had three *pawns* on the board; but, when only one pawn and one ship remained, the *pawn* might advance even to the square of a *king* or a ship, and assume

the power of either." Fifthly; "According to the *Rácshasa's*, or *giants*, (that is, the people of *Lancà*, where the game was invented), there could be neither victory nor defeat, if a king were left on the plain without force; a situation which they named *Cacacáshtrha*." Sixthly, "If three ships happen to meet, and the fourth ship can be brought up to them in the remaining angle, this has the name of *Vrīhannaucà;* and the player of the fourth seizes all the others." Two or three of the remaining couplets are so dark, either from an error in the manuscript or from the antiquity of the language, that I could not understand the *Pandit's* explanation of them, and suspect that they gave even him very indistinct ideas; but it would be easy, if it were worth while, to play at the game by the preceding rules; and a little practice would, perhaps, make the whole intelligible. One circumstance, in this extract from the *Puràn*, seems very surprising: all games of hazard are positively forbidden by *MANU*, yet the game of *Chaturanga*, in which *dice* are used, is taught by the great *VYÁSA* himself, whose lawtract appears with that of *GOTAMA* among the eighteen books, which form the *Dharmasāstra;* but, as *RÁDHÁCÁNT* and his preceptor *JAGANNÁTH* are both employed by government in compiling a Digest of *Indian* laws, and as both of them, especially the venerable Sage of *Tribéni*, understand the game, they are able, I presume, to assign reasons, why it should have been excepted from the general prohibition, and even openly taught by ancient and modern *Bráhmans*.

ON THE BURMHA GAME OF CHESS; COMPARED WITH THE INDIAN, CHINESE, AND PERSIAN GAME OF THE SAME DENOMINATION

HIRAM COX*

DEAR SIR,

I have now the pleasure to send you a drawing of the *Burmha* Chess table, with the pieces arranged according to the ordinary mode of playing the game, and subjoin an account of the *Burmha-game*, with a comparative view of the *Indian*, *Chinese*, and *Persian games*; and should it appear to you worthy notice, I have to request you will do me the favor to lay it before the Society.

It has been said, that an accurate judgement may be formed of any society from a view of the amusements of the people; this is one of those sweeping assertions which indolence too often induces us to admit without sufficient examination and however true in a general sense, is little applicable to the purposes of life; for it often, indeed generally, happens, as in LAVATER'S System of Physiognomy, one feature counteracts the effects of another, so as to perplex the whole and defeat the end of enquiry.

Are the gay, airy Parisians, heretofore so celebrated for polish, and so conversant in the cant of Philanthropy, more humane than our rough Countrymen, who have been stigmatized as sanguinary, from their delighting in boxing, cock-fighting, and bear-baiting?—But instances of contradictions of this kind between particular habits, and general character, in every nation, must be too familiar to you to require illustration by further examples; and I am sure you will agree with me, that it is the wisest and safest course, to avoid forming general conclusions from partial views.

A member does not form a whole; and who has the means

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* By the late Captain communicated in a letter from him to J.H. Harington. Originally published in AR Vol. VII, 1801 under the title.

of examining and comparing all the parts of so stupendous a system as forms the history and character of man, even in the meanest of the subdivisions of society ?—We therefore must not conclude that the *Burmhas* are a scientific, or intelligent people, because they play Chess; nor that they are brutally savage, because they sometimes eat the flesh of their enemies.

Chess, by universal consent, holds the first rank among our sedentary amusements, and its history has employed the pens of many eminent men. Among the number SIR WILLIAM JONES has obliged the world with an Essay, replete as usual with erudition and information. But while I avow the warmest admiration of his talents, and subscribe with all due deference to his authority, I must be allowed to acknowledge a difference of sentiment.

SIR WILLIAM says,—"The beautiful simplicity and extreme perfection of the game, as it is commonly played in Europe and Asia convinces me, that it was invented by one effort of some great genius; not completed by gradual improvements, but formed, to use the phrase of Italian Critics, by the first intention."—But it appears to me that all he afterwards adduces on the subject, is so far from corroborating, that it is in direct contradiction of this opinion; and I trust my further combating it will neither be deemed impertinent or invidious. The errors of a great mind are, of all others the most material to be guarded against; and SIR WILLIAM himself, had he lived to reconsider the subject, I am sure, would have been the first to expunge a passage of so unqualified construction. Perfection has been denied us undoubtedly for wise purposes, and progression is necessary to the happiness of our existence. No human invention is so perfect but it may be improved, and no one is, or has been so great, but another may be greater.

I have elsewhere had occasion to observe that, generally speaking, nature is slow, silent, and uniform in all her operations; and I am induced to think, that what is true of the material world, equally holds as to the intellectual.—In this opinion I am supported by the testimony of SIR ISAAC NEWTON, who with equal modesty and truth replied to one of his admiring friends, that if he surpassed others in his attainments, he owed it entirely to a patient habit of thinking. All

great efforts are violations of the order of nature, and as such, are rather to be deprecated than admired. In common language they are called convulsions, and I confess myself opposed to convulsion of every kind.

SIR WILLIAM JONES's evidence goes to confirm the opinion that we are indebted to the *Hindoos* for the game of Chess; but the description of the game which he has given from the *Bhawishya Puran* has nothing of that beautiful simplicity which called forth his admiration. Indeed he admits, that the Indian game described by him is more complex, and he considers it more modern, than the simple game of the Persians; of which he could not find any account in the writings of the *Brahmans*.

He informs us that the *Sanscrit* name is *Chaturanga*, and the root from which the name of the Game is derived in modern languages. It literally means the four members of an army, Elephants, Horses, Chariots and foot Soldiers, the same as exhibited at this day; but the game described by him is more generally known by the name of *Chatúrájî*, or the *four Kings*, since, he observes, "it is played by four persons representing as many Princes, two allied armies combating on each side." The board is quadrilateral, with sixty four checks as ours; but what forms one army with us, is divided in two, each having its King, Elephant, Horse, and Boat, with four foot soldiers in front, placed at the left hand angle of each face of the board. The power of the King is the same as in the modern game; the Elephant has the same powers as the English Queen, moving at will in all directions; the Horse, the same as the modern Horse or Knight; the Boat as the modern Bishop, with the limitation of moving only two checks at once; the Peon the same as the modern *Pawn*.

This game is mentioned in the oldest Law Books, and is said to have been invented by the wife of RAVAN, King of *Lanca* (i.e. *Ceylon*,) in order to amuse him with an image of war (field war I suppose is meant,) while his metropolis was closely besieged by RAMA in the second age of the World.[1] RAMA, according to SIR WILLIAM JONES's Chronology of the *Hindoos*, appeared on earth at least three thousand eight hundred years

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[1] The high degree of joish, which prevailed at the Court of RAVAN, at this early period, is well worthy notice. In a copy from an ancient *Hindoo* painting, which I possess, his Capital appears to be regularly fortified in the antique stile, with projecting round

ago; and this event happened in an early part of his career; yet notwithstanding these proofs of antiquity and originality, SIR WILLIAM JONES was of opinion that this rudimental and complex game is a more recent invention, than the refined game of the Persians and Eupeans; which he also states to have been certainly invented in India; and appears, therefore, to have considered the original. But to admit this, would, I conceive, be inverting the usual order of things.

Two other distinctions are remarkable of the *Hindoo* game; the introduction of a ship or boat amongst troops, &c. embattled on a plain; and the use of dice, which determine the moves; and as SIR WILLIAM justly observes, exclude it from the rank which has been assigned to Chess among the sciences.

In respect to the first of these distinctions, I cannot help suspecting a mistake in translating the passage, which I must leave to abler critics to decide. In explaining the meaning of *Chatur-anga*, SIR WILLIAM says, "that is the four angas or members of an army, which are said in the *Amaracotha* to be, *Hasty aswa ratha pádátam;* or Elephants, Horses, Chariots, and foot Soldiers." And the same names are used in India at this day.*

SIR WILLIAM notices the Chinese game as having a river described on the board, which the Indian board has not; and seems to infer that a ship or boat might be introduced in the Chinese game with propriety. Hence, a Query might arise, whether the Indian board, as now used, is the ancient one appropriate to the game, in which a boat is said to be introduced instead of a chariot; but in the Chinese game of which I have an account before me, although what is erroneously termed a river is delineated on the board, yet there is no ship or boat among the pieces. Instead of a boat they have a chariot. How are we to reconcile these contradictions ?—I fear in the present state of our information they are inexplicable. At all events I shall attempt only as distinct an accounts as is in

towers, and battlements, and he is said to have defended it with singular ability; hence he and his people were called Magicians and Giants; for to the invading RAMA, and his hordes of barbarian mountaineers, (called in derision *Satyrs* or *Monkeys)* his science must have appeared supernatural. In fact RAVAN appears to have been the Archimedes of *Lanca.*

* See Note at the end of this paper.

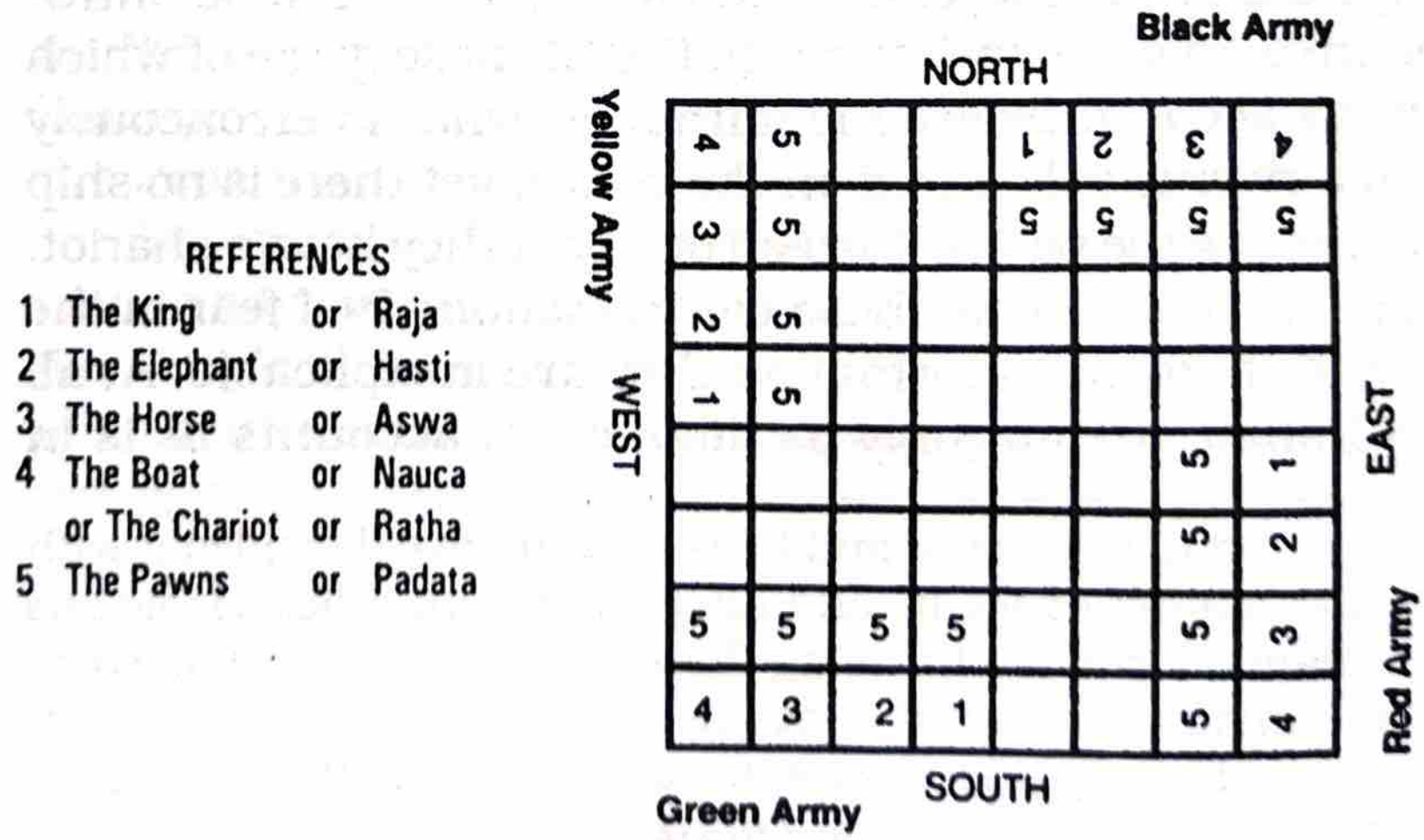
my power, of the four principal games and modes of playing Chess in Asia; viz. first, the one from the *Purans* cited by SIR WILLIAM JONES as above; second, the Chinese described by Mr. IRWIN; third, the *Burmha;* and lastly, the Persian or present *Hindoostanee;* comparing them with each other and the English game; and must leave it to some more fortunate enquirer to determine which is the original.

I have given precedence to the game said to be invented at *Lanca,* as it appears to be the most ancient, according to the authorities adduced by SIR WILLIAM JONES, and as the Persians admit that they received the game from India. I am aware that the Honorable Mr. DAINES BARRINCTON, in a paper published in the Archaeologia at London, gives it as his opinion that the Chinese game is the most ancient; and has taken great pains to disprove the Grecian claim to the invention. (vide 9th volume of the Archaeologia). But according to the Chinese manuscript accompanying MR. IRWIN's account in the Transactions of the Royal Irish Academy, the Chinese invalidate their claim of originality by fixing the date of the game they *assume* the honor of inventing, 174 years before the Christian era.

ANCIENT HINDOO GAME OF CHESS

In the Hindoo game, I have already noticed that the principal distinction from the English, consists in having four

TABLE 1



distinct armies and Kings; each army composed of half the

number of pieces and Pawns, used in one of ours; secondly the Elephant holds the station and power of our Queen; thirdly there is a boat instead of our castle, but with the powers of a Bishop limited to a move of two checks at once; fourthly the Pawn or peon has not an optional rank when advanced to the last line of the adversary's checks, merely assuming the rank of the piece whose place he possesses (excepting the boat); fifthly the use of dice to determine the moves, as follows. When a cinque is thrown, the King or Pawn must be moved; a quatre, the Elephant; a trois, the Horse; and a deux, the boat. Other variations are, that the King, Elephant, and Horse may flay; but cannot be slain : neither does it appear that the King can be removed to a place of more security by any operation similar to the modern mode of castling. Indeed the mode of playing this game is very obscurely described; all that is known of it has already been published by SIR WILLIAM JONES in the Transactions of the Society, to which I must refer those who require further information.

ACCOUNT OF THE CHINESE GAME OF CHESS

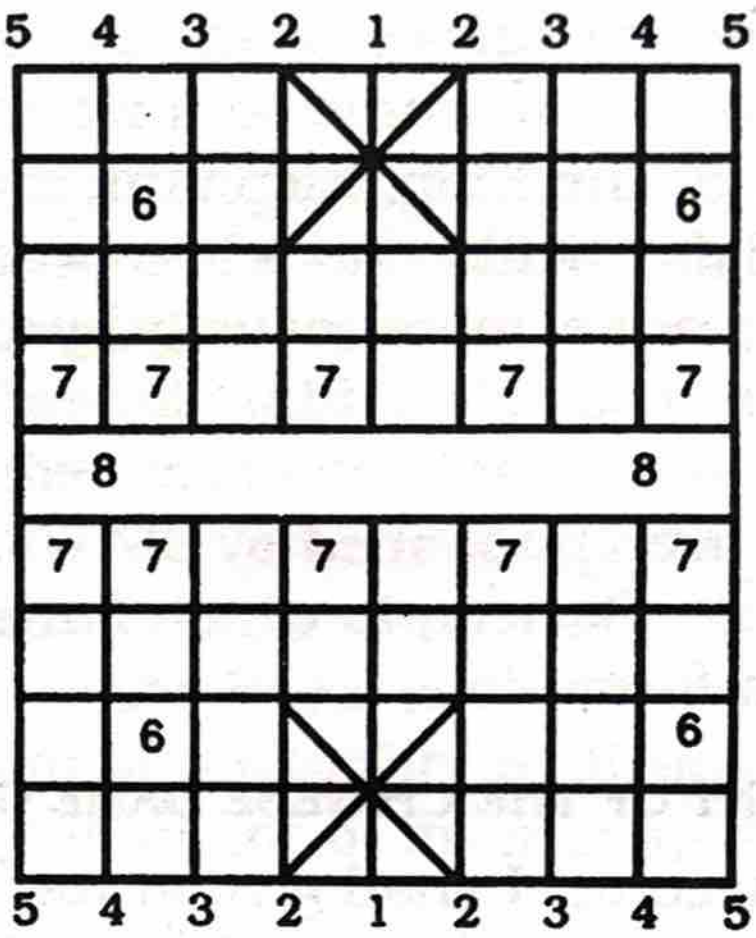
MR. IRWIN's account I shall give in his own words as follows : — "The very next day my *Mandarin* brought me the board and equipage; and I found, that the *Brahmins* were neither mistaken touching the board, which has a river in the middle, to divide the contending parties; nor in the powers of the King, who is entrenched in a Fort, and moves only in that space in every direction; but what I did not hear before, nor do I believe is known out of this country, *(China)* there are two pieces whose movements are distinct from any in the Indian or European game. The *Mandarin* which answers to our Bishop in his station, and side long course, cannot, through age, cross the river; and a Rocket boy, still used in the Indian armies, who is stationed between the lines of each party, acts literally with the motion of the Rocket, by vaulting over a man, and taking his adversary at the other end of the board. Except that the King has his two sons to support him, instead of a Queen, the game in other respects, is like ours; as will appear in the plan of the board and pieces I have the honor to enclose, together with directions to place the men and play the game."

The following Diagram is the Chinese Table, and differs

from ours by having a chasm in the middle, called by some a river, and the crossed sections or forts in which move the *Chong* and *Sou*. The board or game according to Mr. IRWIN is called *Chong-ki*, or royal game.

TABLE 2

References according to my account				*References according to Mr.* Irwin		
1	General	or	Choohong	1	1 The King	or Chong
2	Counsellor	or	Soo.	2	2 Princes	or Sou
3	Elephant	or	Tehong	3	3 Mandarins	or Tchong
4	Horse	or	Mai	4	4 Horses	or Mai
5	Castles Chariots	or	Tche	5	5 Castles Chariots	or Tchong
6	Artillery	or	Paoo	6	6 Rocket boys	or Pao
7	Foot Soldiers	or	Ping	7	7 7 7 7 7 Pawns	or Ping
8	Trench	or	Hoa ki	8	8 River	



The explanation of the position, powers, and moves of the pieces he gives as follows.

"As there are nine pieces instead of eight, to occupy the rear rank, they stand on the lines between, and not within, the squares; the game is consequently played on the lines."

"The King or *Chong* stands on the middle line of this row; his moves resemble those of our King, but are confined to the fortress marked out for him."

"The two Princes, or *Sou*, stand on each side of him, and have equal powers and limits."

"The *Mandarins*, or *Tchong*, answer to our Bishops, and have the same moves, except that they cannot cross the water, or white space in the middle of the board, to annoy the enemy, but stand on the defensive."

"The Knights or rather horses, called *Mái*, stand and move like ours in every respect."

"The War Chariots or *Tche* resemble our rooks or castles."

"The rocket boys, or *Pao*, are pieces whose motions and powers were unknown to us. They act with the direction of a Rocket, and can take none of their adversary's men that have not a piece or paun intervening. To defend your men from this attack it is necessary to open the line between either, to take off the check on the King, or to save a man from being captured by the *Pao*. Their operation is otherwise like that of the Rook; their stations are marked between the pieces and Pawns."

The five Pawns or Ping, make up the number of men equal to that of our board (i.e. sixteen). Instead of taking sideways like ours, they have the Rook's motion, except that it is limited to one step, and is not retrograde. Another important point in which the Ping differs from ours, is that they continue in status quo after reaching their adversary's head quarters. It will appear, however, that the Chinese pieces far exceed the proportion of ours, which occasions the whole force of the contest to fall on them, and thereby precludes the beauty and variety of our game, when reduced to a struggle between the Pawns, who are capable of the highest promotion, and often change the fortune of the day. The posts of the Ping are marked in front."

Sor far Mr. IRWIN. His account being, according to my apprehension, indistinct and incomplete, and to my knowledge in some respects eroneous, I have been induced to make further inquiries on the subject; the result of which, I hope, will supply his deficiencies; or, at least, give us a more accurate idea of the Chinese game.

The game is called by the Chinese *Choke-choohong-ki*, literally the play of the science of war.

The piece 1. which we call the King, is named *Choohong*, which may be rendered the scientific in war or Generalissimo; he moves one pace at a time in any direction, the same as our King, but within the limits of his fort.

The two pieces of next rank No. 2.2. are called *Sou* by the Chinese, which literally means bearded old men, or men of great experience in war. These are supposed to act as Counsellors to the *Choohong*, and have precisely the same moves and powers as the *Chekoy*, in the *Burmha*, or Vizier, in the Persian game, except that they are confined to the limits of the fort with the *Choohong*.

The two pieces No. 3. 3. erroneously named *Mandarins* by Mr. IRWIN, are called *Tchong* by the Chinese, which means an elephant; and they have precisely the same moves and powers as the elephant in the Persian and modern Hindoostanee game. That is, they move diagonally in advance or retrograde, always two steps at a move; but the Chinese *Tchong* has not the power of jumping over the head of an intermediate piece as the Persian elephant does; neither can it advance beyond the limits of its own section, for a reason I shall assign below.

The two pieces No. 4.4. are called *Mái* by the Chinese, meaning horse or cavalry, they have precisely the same moves and powers as in the English and Persian games, and can advance into the enemy's section.

The two pieces No. 5. 5. are called *Tche* by the Chinese, meaning war Chariots, and have the same powers and moves as the Rooks or castles in the European game, advancing also into the enemy's section.

The two pieces No. 6. 6. are called *Pàoo* by the Chinese, meaning Artillery or rocket men. The *Paoo* can move the whole range of both sections direct, transverse, or retrograde, like the English castle, and if any of the adversary's Pieces or Pawns intervene in the direct line, he takes the one immediately in the rear of it.

The Pawns No. 7.7.7.7.7. are called *Ping* by the Chinese, meaning foot Soldiers, they move one square or step at a time, direct in advance, and take their antagonist transversely to the right or left (not diagonally as ours do) nor have they the advantage of obtaining an advance rank as in the English game.

The blank space in the Table 8.8. is called *Hoa ki* by the Chinese, which literally means a trench; and is understood to have been made for defence against an invading army. The Horses, Chariots, and foot Soldiers, are supposed to cross it by means of light bridges of planks; but these not being adequate to bear the bulk of the Elephants, they are reciprocally obliged to remain within the limits of their respective sections.

In other respects the game is like the English one, and ends with destroying the forces on either side, or blocking up the *Choohong*. The board is not checkered black and white, but merely subdivided as in the Diagram. The pieces are round

counters of wood or ivory, with the distinguishing names wrote on them, half dyed red, and half black.

ACCOUNT OF THE BURMHA GAME OF CHESS

The *Burmha* name for the game of Chess is *Chit-tha-reen*, a term applied by them either to a Generalissimo, or warfare; an etymologist perhaps might trace it as a corruption of the *Sanscrit Cha-tur-anga*.

The following Drawing and Diagram will best explain the form of the pieces, &c. and ordinary array of the Battalia.

No. 1. *Ming* or the King, has the same moves and powers

TABLE 3

3							3
	1	4	5	5			
	4	2	6	6	6	6	6
6	6	6					
					6	6	6
6	6	6	6	6	2	4	
			5	5	4	1	
3							3

References

1. Meng, ...The King
2. Chekoy, ...Lieut. General
3.3 Rutha, ...War Chariots
4.4 Chein, ...Elephants
5.5 Mhee, ...Cavalry
6 6 6 6 6 6 6 6 Yein, Foot Soldiers

as in the English game, except that he cannot castle, neither do they admit of what we call stale mate.

No. 2. *Chekoy* Sub-general. He moves diagonally either way in advance or retrograde, but limited to one check or step at a move.

No. 3.3. *Rut'ha*, War Chariot. They have exactly the same moves and powers as the English Castle or Rook.

No. 4.4. *Chein*, Elephants. They have five distinct moves; direct 1. diagonal in advance 2. diagonal retrograde 2. but limited to one check or step at a move : they slay diagonally only; the move direct in advance being only intended to alter the line of their operations, so that they may occasionally have the powers of our King's or Queen's Bishop.

No. 5.5. *Mhee*, Cavalry. They have exactly the same moves and powers as in the English game.

No. 6.6.6.6.6.6.6.6. *Yein* or foot Soldiers. They have the same moves and powers as in the English game; except that they are limited to one check or step at a move, and that the right hand pieces only are susceptible of promotion to the rank of Chekoy, (in the event of his being taken.) It is not necessary for this promotion that they should have advanced to the last row of the adversary's checks, but to that check which is in a diagonal line with the left hand check in the last row of the adversary's section : consequently the right hand Pawn or Yein according to the Diagram will have to advance 4 steps to obtain the rank of Chekoy; the 2d Yein, 3 steps; the 3d Yein, 2 steps; the 4th Yein, 2 steps; and the 5th Yein, 1 step.

Although the array of the Battalia is generally as in the Diagram, yet the *Burmhas* admit of great variations; each party being allowed to arrange their *pieces* ad libitum; that is to say, they may strengthen either wing, or expose the King, according as they estimate each other's abilities; or as caprice or judgement may influence them. In some respects this is tantamount to our giving a piece to an inferior player, but the variation is only to be understood of the pieces, and not of the Pawns.

This liberty, added to the names and powers of the pieces, gives the *Burmha* game more the appearance of a real battle than any other game I know of. The powers of the Chein are well calculated for the defence of each other and the King, where most vulnerable; and the *Rut'ha* or war Chariots are certainly more analogous to an active state of warfare than Rooks or Castles.

PERSIAN AND MODERN HINDOOSTANEE GAME OF CHESS.

The Persian game and table are both called *Shatrang;* or more commonly *Shutrunj,* the form of the table and arrangement of the pieces as in the Diagram.

No. 1. *Sha* or *Pad'sha,* The King, has the same moves and powers as in the English game; but cannot castle, nor is stale mate admitted.

No. 2. *Firz* or more commonly *Vizier,* the General. It is the first piece moved on opening the game, advancing one step direct in front, his Piadah moving one step at the same time. This is said to be done by command of the King that he may

review and regulate the motions of the army. Afterwards he can only move diagonally, in advance or retrograde, one check or step at a move, the same as the *Burmha* Chekoy.

No. 3.3. *Fil* in Persic, *Hust* in Hindoostanee, Elephants. They move diagonally in advance or retrograde, always two steps at a move, and have, what Mr. IRWIN calls, the motion

TABLE 4

5	4	3	2	1	3	4	5
6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	6
5	4	3	2	1	3	4	5

References

1. Sha or Padsha, The King
2. Vizier or Firz, General
3 3 Fil or Hust, Elephant
4 4 Asp or Ghora, Cavalry or Horse
5 5 Rookh or Ruth, War Chariot
6 6 6 6 6 6 6 6 Piadah or foot men.

of a rocket boy hopping over the head of any piece in their way, except the King, and taking any piece which stands on the second check from them in their range.

No. 4.4. *Asp*, Persian, or *Ghora* Hindoostanee, Horse or Cavalry. They have the fame moves and powers as the English Knight.

No. 5.5. *Rookh*, Persian, or *Rut'h* Hindoostanee, war Chariots. They have exactly the same moves and powers as the English Rook or Castle.

No. 6.6.6.6.6.6.6.6. *Piadahs* or Peons, foot men. They have the same moves and powers as the English Pawn, except that they advance only one step at a time on opening the game, and that when any of them arrive at the last line of Checks on their adversary's section, should their own General have been taken, they are then called *Firz*, and distinguished by a Pawn of the adversary being placed on the same square with them.

When the King is checked by another piece, they say *Shah*, *Shah*, or *Kist*; (the latter an Arabic word) and when Check-

mated, they say *Shah-mat*, which means the King is conquered or driven to the last distress; or sometimes *board* or *burd*, the prize is gained or carried; though this expression is more generally used when all the pieces are taken except the King and the game is consequently won.

I shall now make some observations on the foregoing games and compare them with each other.

As far as record is to be admitted in evidence, the first or *Hindoo* game above described is the most ancient, and to my apprehension it has great internal marks of antiquity, namely, the imperfections incident to rudimental science.

A view of the Table. &c. will be sufficient to convince any one who has the least knowledge of Tactics, or the science of Chess, of the imperfections of the *Hindoo* game.

The weakest flank of each army is opposed to its antagonist's forte—and the piece in each army which would be of most use on the flanks, is placed in a situation where its operations are cramped; and although it appears that two armies are allied against the other two, yet the inconvenience of their Battalia in a great measure remains; besides it also appears that each separate army has to guard against the treachery of its Ally, as well as against the common enemy; for it is recommended, and allowed to either of the Kings, to seize on the Throne of his Ally, that he may obtain complete command of both armies, and prosecute conquest for himself alone. But if the Battalia were as perfect as in the European game, the circumstance of using dice, to determine the moves, is fatal to the claim of pre-eminence, or of science, which attaches to the European game, and places the ancient *Hindoo* game on a level with Back-gammon, in which, we often see the most consummate abilities defeated by chance.

Exclusive of the definition of the game in the *Amaracosha*, namely that the four *angas* or members are elephants, horses, chariots and foot soldiers, there are contradictions in the rules given by GOTOMA, and others translated by RAD-HA-CANT, which are irreconcilable unless we suppose they treat of different games.—The first says that "the King, the Elephant and the Horse may slay the foe, but cannot expose themselves to be slain." Hence we infer that the Ship and foot Soldier alone are vulnerable. In another place the commentator says "If a Pawn can march to any square on the oppo-

site extremity of the board, except that of the King or Ship, he assumes whatever power belonged to that square, which promotion is called *Shat-pada* or fix strides." This contradicts the former rule : And again, "but, this privilege of *Shat-pada* was not allowable in the opinion of GOTOMA; when a player had three Pawns on the Chess board, but when only the Pawn, and one Ship remained, the Pawn might even advance to the square of a King or Ship and assume the power of either." From the whole we may gather, that in this game there is much abstruseness with little science; which affords strong presumption of its being rudimental.

I have placed the Chinese game the second in the series, because there is a record of its relative antiquity, but not from conviction, for the next improvement on the ancient *Hindoo* game appears to me to be that, which at present obtains amongst the *Burmhas*, who are *Hindoos* of the *Pali* tribe and derive all their literature and science from the common source.[2] In the *Burmha* game the first dawn of perfection appears, while the ancient *Hindoo* names, according to the *Amaracosha*, are retained, the two armies are consolidated, and commanded by a General immediately under the eye of the King, the order of the Battalia improved, and chance rejected.

The Persian game is but a slight variation in principle from the *Burmha;* the order of battle is restrained to one mode, and the foot soldiers and principals each drawn up at the extreme face of the board or field of battle, in rank entire, according to the improved system of modern warfare. Other alterations appear to me adventitious, or the effect of caprice rather than judgement.

The modern European game appears an improvement on the Persian and only requires that the original names should be restored to the pieces to give it full claim to pre-eminence.

I am at a loss where to place the Chinese game, but its claims to precedence are of little importance.

The account of its invention, for which we are indebted to Mr. EYLES IRWIN, is as follows.

"Translation of an extract from the Concum or Chinese

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[2] The Chess men I had made at *Amarapoorah*, the *Burmha* capital, were the workmanship of some *Cossays*, natives of the Kingdom of *Munipore*, who, as well as the *Burmhas*, are of the sect of BUDDHA, and form the intermediate link between them and the *Bengallies*.

annals respecting the invention of the game of Chess, delivered to me by *Tonqua* a Soldier *Mandarin* of the Province of *Tokien.*"

Three hundred and seventy years after the time of Confucius or 1965 years ago, (171 years before Christ) HUNG COCHEE, King of *Kiangnan*, sent an expedition into the *Shensi* country, under the command of a *Mandarin*, called HEMSING to conquer it.—After one successful campaign, the Soldiers were put into winter quarters, where finding the weather much colder than what they had been accustomed to[3], and being also deprived of their wives and families, the army in general became impatient of their situation, and clamorous to return home. HEMSING, upon this, revolved in his mind the bad consequences of complying with their wishes; and the necessity of soothing his troops and reconciling them to their position appeared urgent, in order to finish his operations the ensuing year. He was a man of genius, as well as a good soldier, and having contemplated some time on the subject, he invented the game of Chess as well for an amusement to his men in their vacant hours, as to inflame their Military ardour, the game being wholly founded on the principles of war. The stratagem succeeded to his wish; the soldiers were delighted with the game, and forgot in their daily contests for victory; the inconvenience of their post. In the spring the General took the field again, and in a few months, added the rich Country of *Shensi* to the kingdom of *Kiangnan*, by the defeat and capture of CHOUPAYEN, a famous warrior among the Chinese. On this conquest HUNG COCHEE assumed the title of Emperor, and CHOUPAYEN put an end to his own life in despair."

In the course of my reading I have met with a similar tale among the Persians; but such tales are easily fabricated, and from the complaisance of national vanity as easily credited.

That HANSING introduced this game with modifications suited to the genius and manners of the Chinese for the purposes ascribed above, I can readily believe; but the introduction of Artillery or rocket boys, the general perfection of the game, similitude to the *Hindoo game*, and date of supposed invention, are strong evidences against its originality.

I am aware that there are many other games of Chess played in Asia; but I consider them merely as anomalies, un-

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[3] *Shensi* is the North West province of China and mountainous.

important or unworthy of note; and the four I have adduced are the principal, to which all the others may be referred.

I shall conclude this long and irregular dissertation with noticing the various Etymologies of the terms, pieces, &c. &c.

The Honorable Mr. DAINES BARRINGTON has taken considerable pains on this subject in the essay above noticed; and the reason he assigns for the uncouth form of the pieces as made in Europe is very just, viz. that we received the game from the Arabs, who, as *Mahomedans*, being prohibited the use of paintings or engraved Images, merely gave to their Chess pieces such distinct forms as enabled them to readily recognize them in play; and such arbitrary variation being once introduced, others naturally followed, according to the caprice or taste of each new innovator.

But he differs from Doctor HYDE and SIR WILLIAM JONES in respect to our Exchequer being named from the Chess Table; proving that the term was not directly so derived; but that is not proving it was not derived indirectly; for although the game of Chess might not have been known to the nations of modern Europe, so early as the Norman conquest; yet it appears from the Check or reckoning board found at *Pompeii*, and from the Latin name Scaccario, that the use of the table was very early known in Europe; and therefore SIR WILLIAM JONES may still be right in deriving Exchequer from *Chaturanga*. One remarkable coincidence in the Asiatic tables may be noticed; they are all subdivided into sixty-four squares, but not checkered.

The piece we call the King is also so stiled in all the games that I know, except the Chinese, who call it the *Chòohong*, or scientific in war.

The piece we call the Queen, the Honorable Mr. BARRINGTON derives from the Persian *Pherz* or General; and exposes the absurdity of calling this piece a Queen, by asking how we are to metamorphose a foot Soldier or Pawn into a Queen, as admitted in the English game, &c. SIR WILLIAM JONES more correctly writes it *Ferz*, and adds "hence the French have derived Vierge, &c."—If so, the blunder arises from French gallantry. Vierge in French is *Virgo*, and consorted with the King they by a very natural transition made their Virgin a Queen. But, whence the Persian title of *Ferz* ? Mr. RICHARDSON merely informs us that *Ferz*, *Ferzeen*, *Ferzan* and *Ferzee*, mean the Queen at Chess. The common term for this piece in the Per-

sian language is *Vizeer* or *Vuzeer* a Minister, but in their emphatic way of writing and speaking, they have in this case made a noun substantive of a distinctive adjective, to denote the eminence of the piece as I shall have further occasion to notice. *Ferz* or *Ferzan* therefore neither means Queen or General in a literal sense; but eminent, distinguished, &c. *Ferzee* further means science, learning, wisdom, &c.

The piece we call a Castle or Rook, the Honorable, Mr. BARRINGTON says— is derived from the Italian *il Rocco*—but what is *il Rocco* (the Castle) derived from ? SIR WILLIAM JONES says "it were in vain to seek an Etymology of the word *Rookh* in the modern Persian language, for in all the passages extracted from *Ferdausi* and *Jami* where *Rokh* is conceived to mean a Hero, or a fabulous Bird, it signifies, I believe, no more than a cheek or face."—My enquiries teach me that in this instance also, a name has been formed from a quality; and that in modern Persian *Rookh* means facing or bearing in a direct line; and applied to the *Rookh* at Chess, and its moves, is very appropriate; at the same time I have no doubt that the Persian word was originally derived with the game from the Hindoos, who call the piece *Rot'h* and *Rut'ha*; and denominate the Ship or Boat, which is substituted for the Castle, either *Naucá* or *Róca*. The corruption is as easy as the French Vierge from *Pherz* or *Ferz*, and the only difference is, that Persian pride has endeavoured to legitimise the blunder by assigning a reason for it.

The pieces we call Bishops, the Honorable Mr. DAINES BARRINGTON says, are called by the French fou or fools, and supposes the epithet to have been bestowed on them by some wag, because Kings and Queens were anciently attended by fools.

I am ready to admit that war is but too often the offspring of vice and folly, and that it is no great proof of wisdom in Bishops to forsake their habits of peace for war; but think it is refining a little too much, to stigmatize them in particular as fools on that account.—SIR WILLIAM JONES in my opinion adduces a more legitimate derivation, supposing the Fol or Fou of the French (for it is pronounced both ways occasionally) to be derived from the Persian *fil* or *feel*, an elephant. In Italian these pieces are still denominated *il Alfino* or the Elephant, and so they were in England at the beginning of the seventeenth century.—Perhaps the French fou may have been

derived from the Chinese fou, the grave Councillors who attend on the *Choohong* or General, and who have the same Diagonal moves as the Bishops; and their *Mandarin* caps may have been changed with their names for mitres as we now see them engraved.

The pieces we call Knights or Horses have in general the same appellation in other languages.

The Pawns, it is easy to perceive, are derived from *Paon* (a foot) Hindoostanee, *Piadah* Persian, and *Padati* Sanscrit.

The learned Doctor HYDE says "that the word Chess is derived from the Persian word *Shah* or King, which word is often used in playing, to caution the King against danger. Hence Europeans and others have denominated the game *Shachiludium* and *Shailudium; and* the English *Chess.*"

The term Mate used at the termination of the game, is from the Persian *Shah-Mat,* the King is conquered or driven to the last distress.

The Persians also have a term peculiar to themselves, to denote the advancement of a *Pawn* or *Piadah.* When it arrives at the last line of checks in the adversary's division, they say it is *Ferzeen* or distinguished, and in case the *Vizeer* or *Ferz* has been lost, it assumes its rank, and is distinguished by one of the adversary's Pawns being placed on the same square with it.

When I sat down to write this letter I had no idea of extending it to so great a length, nor had I as you will easily perceive, formed any regular plan of discussion. I therefore fear it will not only be found tedious, but perplexed. Yet, however imperfect or unimportant in itself, I am induced to hope it will be received with indulgence, as tending to excite the inquiries of abler critics on a subject equally interesting and curious, and to produce that collision of mind whence truth is elicited.

I have the Honor to remain,
Dear Sir,
Your obliged and faithful Servant,

HIRAM COX.

Waujea Province of Chittagong, May 28th, 1799.

P.S. I have annexed a comparative Table of the names and terms used at the game of Chess in four principal Asiatic, and four principal European languages.

H. Cox.

COMPARATIVE TABLE of Terms used at the Game of Chess, in four principal Asiatic, and four principal European languages.

English	*French*	*Italian*	*German*	*Sanscrit*	*Persian*	*Chinese*	*Burmha*
Chess,	Échecs	Scacchi	Scachkspiel,	Chaturanga, Chaturaji,	Shutrang, Shatranj,	Choke Choo-hong-ki	Chit-tharein
King,	Roi,	Ré,	Koenig,	Raja,	Sháh, Pads-háh,	Choohong, (Generali-ssimo,)	Meng.
Queen	Dame,	Regina, Dame	Koenigin, Dame	Mantri [A] (Prime mini-ster)	Vizír Ferz Ferzí (Mini-ster,)	Sou, (Coun-sellor)	Chekoy. (General)
Bishop	Fou,	Alfino,	Springer,	Hastí, Pilu Elephant	Fíl Pil (Ele-phant,)	Tchong, Elephant	Chein, (Elephant)
Knight,	Cavalier,	Cavaliere, Cavallo,	Ritter,	Aswa, (Horse)	Asp, Feres (Horse,)	Mái, (Horse)	Mhee, (Cavalry)
Castle or Rock,	Tour, Roi,	Rocco,	Elephant, Roche,	Ratha, (a Car) Nauca, or Roca (a ship or boat,)	Rukh,	Tehe (War-chariot) Paoo, (Ahtillery)	Rut.ha; (War-chariot.)

Contd.....p. 47

English	*French*	*Italian*	*German*	*Sanscrit*	*Persian*	*Chinese*	*Burmha*
Pawn,	Pion,	Pedina, Pedona,	Baur,	Padáti, Padica, (foot Soldier)	Peadah, Bidek,	Ping, Foot-soldiers,	Yein, (foot soldiers,)
Check,	Échec au Roi,	Scaccoral Ré,	Schach,		Sheh, Kish, kisht, [B]		Kwai
Check-mate,or mate	Échec et mat. Mat	Scarco Matto	Schach matt,		Mát, Sheh mát,		Hoombee.

N.B. The Sanscrit and Persian Terms in this Table are expressed according to *Sir W. Jones's* system of orthography. *As. Res. Vol. 1.*

A. This piece is not used in the game of *Chatúráji*, described in the preceding Paper; but is mentioned in Sanscrit Books as one of the pieces of the *Chaturanga*; the true game of Chess.

B. These terms are more generally used than those stated in Pages 40-41, in which, by a typographical error, shah has been repeated for sheh, its Synonym. On the authority of an Arabic Dictionary the term *Kist* was mentioned, as of Arabic origin. But on further enquiry, the term used for *Check* appears to be *Kish* or *Kisht*, for the origin and meaning of which see the Dictionary of MENINSKI or RICHARDSON.

THE INVENTION OF CHESS AND BACKGAMMON

H. G. RAVERTY*

There appears to be much uncertainty regarding the origin of the game of chess. One who has written on the subject asserts, that "The date of its inception no one has discovered, and the question remains to this day a vexed one. Periodically something turns up to bury all former suppositions in the matter, and the day of its birth is put back a few thousand years."

A German Professor however is said to have "discovered from the last excavations on the pyramids of Sakkara, a wall painting in which an Egyptian king, Teta, is represented playing chess with a high official. This monarch is stated to have reigned about 3,700 B.C.; while another Professor corrects this chronology, and puts it back some six centuries to 3,300 B.C.; so that, according to this last surmise, the game of chess is very old indeed, and must have been known in the once mysterious land of Mizraim *only* about 5,205 years ago. But all this is absurd.

The game of chess is mentioned in Sanskrit literature, and may be found in some stanzas occurring in the writings of two Kash-mīrī authors, Ratnā-kara and Rud-raṭa, the first of whom lived in the first half of the ninth century A.D., and the other in the second half, and in their writings the game is called "*Chaturanga*, or the Four Membered (Army)."

Abū Rīhān, the Berūnī or Foreigner, as he is called (the "Albērūnī" of Europeans—*al* is merely the Arabic article answering to 'the'), who wrote in the reign of Sultān Mas'ūd of Ghaznih, says it was well known in his time, early in the eleventh century A.D.—1030 to 1038.

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* This article of Major Raverty was read in March 1902 and received on 2nd April, 1902. This note in the original publication perhaps indicates that the author submitted the revised article for publication after a month or so from the date of reading the same in the monthly meeting of the Society.

But the earliest mention of the game in Sanskrit writings, as far as we know, is in the first half of the seventh century A.D., in a work entitled "Harsha-karita" said to be the earliest attempt at historical romance in that language, which was translated by Professor E.B. Cowell of Cambridge a few years since; but chess is only referred to therein as *known* in Hind, not the time of its inception.

I shall now proceed to show how, when, and why it was invented.

Among the events of the year 353 H., which commenced on the 1st of August, 946, of the Christian era, just nine hundred and fifty-five years ago, the death is recorded of Abū-Bikr Muḥammad, known as Sūl-uṣ-Ṣūlī, or Ṣūl who was a native of a place called Ṣūlī. He was a man of vast erudition, and proficient in most of the sciences and learning then cultivated, including chronology and the traditions of the prophet, Muḥammad, and was the author of several works. He was moreover, the greatest chess-player then known, and was famous as such throughout the Musalmān countries. His skill and proficiency in this game, in consequence, became a proverb; and when anyone attained great skill therein, people used to say : "So-and-so is a perfect Ṣūl at chess", or "He is as proficient as Ṣūl before him."

On this account an idea arose among some persons, that Ṣūl was himself the inventor of the game; but this was totally incorrect. It was invented by the sage, Sahsih or Sihssih, or Sis as it is written by different foreign, *i.e.* non-Hindī, authorities—but it is a Musalmān corruption of the purely Hindī name of Sahasī, son of Dāhir, whose family, in after years, became rulers of Sind, and which Sahasī was also known under the by-name of Laj-Lāj. He is said to have invented it for a Rai or Rājah of the territory of Sind, named Bhalīt, by some called Baghil, who was famous under the name or title of Sheram. The reason of its invention is said to have been because Ard-shīr, son of Bābak, of the Sāsānīān dynasty of Īrān-Zamīn, or the ancient Persian empire, had invented, long before, the game of *Nard* or Backgammon.

Ard-shīr Bābakān having invented it, the game was also sometimes called Nard-i-shīr, after him. He devised a

chequered cloth (both it and chess are still played throughout the East, on a chequered cloth, which folds up, instead of on a board, as with us) containing twelve divisions or compartments according to the twelve solar months of the Persian year and the *muhrahs* or counters with which *Nard* was played, corresponded with the number of days of the lunar month of the Fire-Worshippers or Ancient Persians; and one half of the counters were white and the other half black, because one half the month has moonlight nights, and the other half dark ones. The moves from one division or space to another he likened to the decrees of destiny, which vary and change, are turned and inverted, in the life of every human being, the fate of each one differing from that of another.

So, after this game of *Nard* or Backgammon had been invented, it was received with the utmost interest and delight; and after it had become generally known the people of Fārs (Persia proper) used to make a great boast of it, and to exult over those of Sind adjoining them. On this account the ruler of Sind is said to have sent for the sage Sahsih (Sahasī) and to have commanded him to try and invent some other game, which should entirely surpass this boasted Persian game of *Nard*, but to be also played like it, on a chequered cloth, and which among the wise, should be considered much more intellectual, and to require much greater skill, and far deeper thought, to play successfully.

But some centuries elapsed between the time of Ardshīr Bābakān, who was the first monarch of the fourth or Sāsānīān dynasty of ancient Persia, and that of Nūhshīrwān, who was the first of the fifth or Akāsirah dynasty, and in whose reign the Rái or ruler of Sind is said to have sent him a set of chess-men, and a chequered cloth to play it on, as presently to be related.

In the Sindī, as well as in the Hindī dialects, the name of this game is said to be derived from the Sanskrit word *Chaturaṅ*, signifying 'artful', 'cunning', and also 'variegated', 'bi-coloured', 'tesselated', 'chequered'; which is said to refer to the several members, pieces, or component parts, a mere figure of speech referring to the elephant, the horse, the chariot, and the foot soldier, common man, or pawn.

The Persians rejected the short *u* in the word, and called it Shatrang, while the Arabs styled the game Shatranj.[1]

The statement regarding its invention, contained in a famous old book, entitled "Nafāyis-ul-Fūnūn," or "Precious Things in Science," is as follows.

Sahsih (Sahasī), also known as Laj-Lāj, son of Dāhir, which latter was one of the ancient rulers of Sind (and the last of the Rais or kings of Sind, who fell in battle fighting against the 'Arabs, when they subdued that territory in 94 H.—712-13 A.D.—, was also called Dāhir), was the inventor of the game. Two reasons are given why it was invented. One is, and apparently the most authentic one, that among the ancient rulers of Sind, Rai Bhalīt,[2] by some called Rai Baghil, who was very warlike, and who was never contented unless leading his troops against some one, and carrying on wars against his neighbours, at last became afflicted with some

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[1] An amusing scene occurred on one occasion with reference to the pronunciation of the name of chess, at a Court of Requests at Poonah in 1851 of which I was a member, when the Assistant Bāzār Master, who acted as Interpreter to the Court, mistook the word Shatrang—Chess—for Shatranjī—a Carpet. A native, one of the professed chess players, had made a claim on a young Queen's officer totally ignorant of the language, for money lost to him while playing chess, and which the Interpreter rendered, "*money, the price of a carpet.*" When the President was about to give the claim in the native's favour—and the Interpreter had had ample time to correct his mistake, had he known of it—I ventured to observe that the Interpreter had made "a slight mistake", and that the claim was not for a carpet, but for money lost at chess, and which, on being again asked, the native confessed. On this the President, a hot old Colonel, thundered out to the claimant : "Get away you insolent rascal! I have a great mind to order you a flogging, coming here and taking up the time of the Court with your gambling claims !"

[2] Al-Mas'ūdī who wrote the "Murūj-uz Zahab wa Ma'ādīn-ul-Jauāhir—" "Meadows of Gold and Mines of Gems"—and described the state of the countries of the east and the west, about 332-33 H. (945 A.D.), in his 7th Chapter, records, that Dab-Shalīm, one of the kings of Sind, who wrote the famous book, "Kalīlah and Damnah," was succeeded by another king named Bhalit, who reigned 80 years; and other writers, including the "Gardaizī", state that, in his time, the book in question, and the game of chess and the means of playing it, were despatched to Nuh-shīrwān, as mentioned farther on.

painful disorder which precluded him from sitting a horse, or on an elephant; and as he was passionately fond of military operations, and "setting squadrons on the field," he assembled together the sages, and all the most sagacious and ingenious persons of his court and of Sind, and addressed them, saying : "As you are all aware that I am afflicted with this complaint, I desire that you would devise some contrivance, whereby, without being obliged to sit on horse-back or on an elephant, I may still be able to occupy myself in (the semblance of) warfare; so that I may divert my thoughts from brooding over this disorder afflicting me, and thereby obtain some relief."

Sahsih (Sahasī), otherwise Laj-Lāj, son of Dāhir, then came forward, and having made his obeisance, represented, saying: "I have in my possession an expedient whereby this difficulty may be solved and remedied, and the Rai obtain the alleviation he seeks." Thus saying, he arose, and having gone to his own dwelling, he soon returned, bringing along with him the game of chess complete, a cloth to play it upon, and the chess-men, all of which he had invented. The other wise men there assembled greatly applauded Sahsih for his invention, and considered that *nard* or backgammon was not to be compared with it; while Rai Bhalīt, was so transported with delight, that he declared to Sahsih, saying : "Demand of me, O sage whatever thou mayest desire, and I will grant it unto thee."

Sahsih, thanking the king, replied : "If the Rai shall be pleased to grant what I ask for, well and good, otherwise it is as he may please to command. I merely ask that a single grain of wheat may be placed on the first square of the chess-cloth, and doubled every time on each succeeding one. For example; on the first square one grain of wheat on the second two, on the third, four, and on the fourth, eight, and so on; and when the number of squares on the cloth shall have been computed after this manner, be pleased, O Rai ! to command that that quantity of wheat be made over to me."

When Rai Bhalīt heard this, as he supposed, modest request, he exclaimed to those present in his assembly, in the most contemptuous manner : "I was desirous of bestowing upon him something of great value, and he has instead, merely asked for the most insignificant and paltry thing possible !" To this Sahsih replied : "This is the request that I desire to make, if the Rai shall be pleased to grant it, I do not desire

anything more, and shall be quite satisfied with that." The Rai, who imagined he had gone out of his wits, commanded that what he had asked for should be given to him. But when the revenue officials began to make their computation, in order to carry out the Rai's commands, they, in a great fright, despatched one of their number to his presence, who represented saying : "In the whole of our country such a quantity of wheat cannot be obtained as would be required to carry out the Rai's commands respecting Sahsih." When Rai Bhalīt heard this statement, he was filled with amazement, and could not credit it; and he commanded that all the revenue officials should be summoned before him, and show how they arrived at, as he conceived, such an absurd conclusion.

When the revenue officials, with very long faces, appeared before him, he required them to show how they made out that there was such difficulty, nay impossibility, in complying with what Sahsih had asked for; and what they thought it would be advisable to do under the circumstances. They replied, that if the wheat produce of the whole world could be collected together, it would not come up to the quantity required to carry out the Rai's command. On hearing this, Bhalīt was still more amazed than before, and he felt certain that they could not be speaking the truth; and he commanded that they should proceed to prove their statement clearly and fully. A number of arithmeticians accordingly assembled together for the purpose; and after making their calculations, declared that it was beyond the power of anyone to comply with Sahsih's request. The way in which they proceeded to prove this was, that, having placed one grain of wheat on the first square, and doubling the number each time, when they reached the sixteenth, it was proved that the quantity then amounted to 32,760 grains of wheat, which is equal to 5 *sers*;[3] and when the nineteenth square was reached, a *mann* was required, which is equal to 40 *sers*. Going on calculating in this manner by the time they came to the fortieth square, the quantity required was 2,970,152 *manns*, which the revenue officials computed to be the produce of one city with its dependent lands and villages, according to the revenue custom in those parts; and they then began to calculate by

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[3] A weight varying from one pound to one pound fourteen ounces in different parts.

cities. For the fiftieth square it was found that the produce of 1,024 such cities would be required; for the sixtieth square, the produce of 1,048,576 cities; and for the sixty-fourth or last square, 16,777,216 cities ! But, taking the surface of the whole earth into account, if there should be one city on every square mile even, there would not be sufficient to furnish the quantity of wheat required to carry out the promise given to Sahsih, much less the cities and their lands and villages contained in the Rai's dominions. Hearing this astonishing statement, Rai Bhalīt turned his face towards Sahsih and exclaimed : "O sage ! thy genius and sagacity in inventing this game of chess are as nothing compared with the astonishing kind of reward which thou hast chosen for it."

As it was found thus to be impossible to comply with Sahsih's request, whether he received or accepted any other reward, the chroniclers do not say. Be this as it may, Rai Bhalīt used to be constantly occupied in playing the game up to the time of his death. When this took place, there was no heir to succeed him on the throne, save his wife, who was then pregnant by him. Consequently, his widow, in concert with the chief men of the country, proceeded to administer its affairs until the period arrived for her being delivered; and she gave birth to a male child. She gave him the name—not a *title* here—of Shāh; and used to devote herself to his bringing up, and to his education. During his childhood and early youth, she continued as before to carry on the affairs of the country; and when Shāh grew up, he, inheriting his late father's warlike spirit, began to undertake military expeditions; and he brought the whole of his father's territories, some of which had been seized by enemies during his minority, completely under his sway. In whatever direction he turned his arms he used to be successful, until after some time had passed away, in one of his more distant expeditions, he was dangerously wounded in an encounter, and died of his wounds.

There was no one about the court who could venture to break this sad news to his mother, and acquaint her with the fate of her son, until one of the chief men, who was a proficient in the game of chess, which her late husband, Rai Bhalīt, used so much to delight in, agreed to acquaint her. When he reached the presence of the Rānī, he found her in a state of

great anxiety and despondency, and her mind much disturbed on account of the prolonged absence of her son. Although he was well aware of the reason, he inquired of her the cause of her affliction, and the disturbed state of her mind, waiting for an opportunity to acquaint her with her son's fate. She replied : "It is now a long time that no news has been received of Shāh, my son, and nothing appears to be known as to the cause thereof, or what may have befallen him; and this surely is enough to make his mother's heart sad." The great man replied, saying : "It should be known to the Rānī, that from the hardships and dangers attending distant expeditions there is no remedy, and no avoiding them, nor the anxieties, uncertainties, and reverses attendant on the exercise of sovereign power, and the conduct of military affairs." He then managed to lead the conversation to the invention of the game of chess for the amusement and diversion of the late Rai, her husband, which interested her so much, that she requested him to go at once and bring the chess-men and the cloth to play it on, and teach her how the game was played. He did so accordingly; and he continued to teach her for some days, in such wise that she soon gained some expertness therein, while, at the same time, it diverted her mind from constantly brooding over the non-receipt of authentic tidings of her son.

She was one day engaged in playing the game with this great man, and was winning, the superiority being on her side, when all at once she called for the Shāh or King; and as her opponent's Shāh had no move left on the board or cloth, she exclaimed : "Shāh māt," which, literally, means, "Shāh is undone," "overthrown," or "destroyed." The great man, now finding the opportunity he sought, replied : "May the life of the Rānī be prolonged, but it is now some time that this very mishap occurred to Shāh, her son, as is here shown; and no one dared to break the sad news; but now it has been pronounced from her own lips." The truth now flashed upon her, and the fate of her son she thus learnt by means of the game of chess; and though she was greatly distressed, as may naturally be conceived, the delicate manner in which it was imparted, tended, in some measure, to alleviate her affliction and sorrow, and to enable her to resign herself to the inevitable and irrevocable.

There is, however, another account respecting the manner

in which the news of her son's death was imparted to the Rānī, as I before mentioned. It is, that when Rai Bhalīt found his end approaching, he named his only son, Gau, then a mere boy, his successor, and soon after died. On account of his youth he was then incapable of being intrusted to carry on the affairs of government, and, consequently, the chief men of the kingdom held counsel together, and deemed it advisable to confer the government on the late Rai's brother, Gau's uncle, who was named Dambīr, and made him Regent, until such time as Gau should be capable of assuming the reins of authority.

As soon as Dambīr became firmly established in possession, and affairs had assumed a settled state, he married the widow of his late brother, the mother of Gau; and she in due course of time bore him a son, who was named Talchand. Not long after Dambīr also died, and the twice widowed mother of these two sons by her two husbands, was left to administer the affairs of the country, until her eldest son should be capable of doing so, and she accordingly assumed the reins of Government. But as her two sons grew up, rivalry arose between them, which continued to increase, until, at last, when they had attained near unto man's estate and years of discretion, they began openly to quarrel for the possession of the sovereignty. Notwithstanding that their partizans and supporters and well-wishers endeavoured to pacify them, and bring about a reconciliation between the rivals, their efforts were of no avail, and, at last, the two brothers came to an open rupture, and hostilities ensued between them. Having mustered their followers, they come to an encounter, during which, the forces of Talchand took to flight, leaving him on the field among his adversaries. He was mounted on an elephant, and was unable to get out of the *mélée*, and manfully stood his ground. His brother's forces had so completely surrounded him, indeed, that his elephant could not move one way or other, and his escape was entirely cut off; and in this helpless state he died of pride and chagrin. His mother was overwhelmed with grief at his loss, and would not be comforted; and it was with great difficulty that she could be prevented from ascending the funeral pyre with the corpse of her son, Talchand.

Gau, her eldest, sent a message to his mother, in order to

clear himself from the supposition that he had caused his brother to be put to death, and at the same time, besought her to abandon the idea of destroying herself; that he had had nothing to do with his brother's death, which had happened in the manner related above. Gau then directed the sages of Sind to adopt some means of demonstrating to his mother how Talchand was situated at the time of his death; and this one of them succeeded in doing by means of the game of chess, in which he had managed to interest her. He took the chess-men and chequered cloth, and showed her how the game was played. In the course of the game the Shāh Bādshāh, or Shāh, the King, on the board or cloth, became *shāshdār*, or unable to move, and the Foot-men, the Elephant (the Bishop of Europeans), the Horse-man (the Knight or, Chevalier), and the Wazīr or Queen, surrounded the Shāh Bādshāh or King, on all sides, when the players exclaimed : "Shāh māt" or "Shāh, the King, is undone or destroyed," and having no move left, and no means of flight or retreat, he perished accordingly, and the game was won.

The wise men who were present during the playing of the game, now succeeded in showing the Rāni that this game represented the situation and positions of Gau and his brother, Talchand, on the occasion of the latter's death, after being deserted by his followers, and being left on the field completely surrounded by his opponents; that Gau himself never moved from his position in the slightest degree; but that his forces had made Talchand "*shāshdār*" or unable to move; and that Talchand, finding himself in this position, out of his great pride, and the chagrin at the helpless state he found himself in, died, and thus became "Shāh Māt" or undone—Check-mated.

The Rānī thus became convinced as to the cause and manner of her son Talchand's death; and she was satisfied in her mind that Gau had not slain his brother. She now learnt the game, and began herself to play it; and whenever the "Shāh Māt" came about, she would melt into tears at the remembrance of her son's fate; and Gau now became ruler of the country.

It is from these words "Shāh Māt," that the words "Check Mate" are derived, showing how words in the course of ages, handed down, too, from one race of people to another, become

vitiated. The word "Māt" is derived from the 'Arabic *māta*, "he is dead"; and is used in Persian to signify 'conquered'; 'subjected', 'reduced to the last extremity', etc. Both Shāh and Bādshāh mean a king or sovereign, but the former word is given as a name to a man, as well as being used as a title, but the latter very rarely so, as in the title and names of the famous Saljūk sovereign, Sultān Malik Shāh, all three words being of the same meaning; but the first is his title, and the latter his name, Malik Shāh. The word "Rukh", likewise, which Europeans call the Rook or Castle, has various meaning, one of which is the name of the fabulous bird of the "Arabian Nights," and other eastern romances and traditions (but vitiated into "Roc"), and after which word, "Rukh", eastern lexicographers say, one of the pieces in chess was named.

It remains now to be mentioned how and in what manner the game of chess was first introduced into Īrān-Zamīn or the ancient Persian empire.

That part of western Hind or India lying nearest to Persia, which at present constitutes the province of Sind, and the southern part of the country of the Panj Āb or Five Rivers, at the period in question, and for a long time after, was well peopled, and in a flourishing condition. The Mihrān of Sind, the great river known as the Great Mihrān, or Hakṛā, or Wahindah, and now known as "the Lost River of the Indian Desert," or more correctly, the Dried up Hakṛā, flowed through the middle of the country and fertilized it. The Sindhu, or Indus of the Greeks, was at that period but a tributary of the Mihrān or Hakṛā and united with the Panj Āb or Five Rivers, giving name to the present territory so called, three days' journey below, or to the southward of Multān. Sind had at a very early period, formed part of the empire of the Persians; and in the time of the Kaiānīān, or third Persian dynasty, in the reign of Gushtāsif, Bahman, his grandson, and subsequent successor, led an army into Sind and Western India. He reduced Sind completely, and some portion of India adjoining it; and in the district of Sind known as Būdah, he founded a city, which he named after himself, Bahman-Ābād or Bahman-Nih, which the people of Sind, in their dialect, call Bahman-No, or Bahman's City—*ābād* and *nih* both meaning a city in the ancient Persian. The ruins of this city of Bahman still remain; but English writers, under the

erroneous idea that the name must refer to the Sanskrit word Brahman, and unacquainted with the past history of those parts, have turned it into Brahman-ābād—a purely Sanskrit name with a purely Persian termination, a wholly impossible combination.

Bahman, known as "Dirāz Dast," or "the Long Armed," is the Longimanus of the Greek writers. He is entitled Kai Ard-shīr, who married Ḥadassah or Esther, the Isrā'ilī, a direct descendant of Ṭālūṭ or Saul, king of Isrā'il; and to Bahman, the Isrā'ilīs owed their delivery from captivity.[4]

Thus in the time of Nūh-shīrwān, the first monarch of the fifth or Akāsirā (the plural of Kisrā) dynasty, known as "The Just", the territory of the rulers of Sind extended into the northern Panj Āb of the present day, to the then southern boundary of the Kash-mīr kingdom, which then extended over the whole of the alpine Panj Āb and beyond; on the east it adjoined Hājpūt-ānah; northwest to the Khwājah Āmarān range; and west over great part of Mukrān. The then rulers of Sind were not under the direct control of the Persians; but they acknowledged the supremacy of the Persian monarchs, and paid a small tribute in virtue thereof.

Shortly after Nūh-shīrwān had reached his capital, Iṣṭakhur of Fārs or Persia proper, on his return from an expedition against the Khākān of the Turks, an envoy reached his court from the Rai of Sind bringing presents for the Kisrā, Nūh-shīrwān, including several elephants; and among other curious things, a set of chess-men, and a cloth on which to play the game. The envoy also brought a message from his sovereign, the Rai of Sind, to the effect that, if the sages of the Kisrā, -Nūh-shīrwān's court could discover how this game was played, which game one of the sages of Sind had invented, he would be ready to give up his territory and his treasures to him; but, if they could not, it would be unworthy in him to acknowledge Nūh-shīrwān's superiority, or pay tribute to him in future; and it would be unjust and unbecoming in him, the Kisrā, under such circumstances, to entertain the idea of enforcing it by invading his territory; and further, in case any of the Kisrā's wise men had invented any thing of the kind, that he would be pleased to send it to him." This message,

[4] See my "Mihrān of Sind," in the "Journal," Vol. LXI., Part III. for 1892, and "Extra Number," for 1895.

therefore, was equivalent to a wager, that he would stake his territory and wealth against Nūh-shīrwān's claim to suzerainty over Sind and the extortion of tribute, and that the sages of Persia could not discover how the game of chess should be played; but, in this, the Rai of Sind was "Check Mated" at his own game, as will presently appear.

I must here retrace my steps for a moment, to refer to the famous Minister of Nūh-shīrwān, the sage, Būzur Jamhir.

One night in the early part of his reign, Nūh-shīrwān had a dream, which greatly disturbed him. He beheld himself seated on the throne; with a goblet of wine in his hand, and was about to quaff some of its contents when a hog, which was seated at his side unperceived, snatched the goblet out of his hand, and drank of the contents. He caused the wise men of his court to be summoned to his presence; and when they were assembled he related to them his horrid dream, and requested that they would interpret its meaning to him. All were at a loss to explain it, until after a short time, one of the Mūbids or Priests of the Gabrs or Fire Worshippers, brought to Nūh-shīrwān's presence, a young man, a native of Marw of Khurāsān, who had lately been studying at Balkh, where was the great Ātish-Kadah or Temple of the Gabrs, who was named Abūzur Jamhir, or Būzur Jamhir, to interpret the monarch's dream, which still disturbed him greatly. The dream having been told him, he, after some consideration, explained it. He said : "In the Kisrā's *ḥaram* (vul. "harem")—which contained upwards of one hundred ladies, the sisters and daughters of kings and petty rulers—there is one lady, the daughter of the Malik or king of Chāje (the ancient name of Farghānah) of Turkistān; and along with her, in the disguise of a slave girl, there is a youth, and he is on terms of intimacy with her." This interpretation amazed all present; and Nūh-shīrwān commanded that investigation should at once be made, and that all the ladies and female attendants of the *ḥaram* should be brought before him one by one; and the young man, the Khwājah, Būzur Jamhir, was in attendance. He detected the youth disguised as a female slave; and he, along with his paramour, was forthwith put to death.

From that time forth, the favour of Nūh-shīrwān was bestowed upon the young Khwājah, whose esteem he acquired, and who rose to high rank, soon becoming his chief

minister. At last, according to the chronicler, Abū-l-Fazl-i-Baihakī, who wrote about the year 450 H. (1058 A.D.), Būzur Jamhir fell into disfavour, because he abandoned the faith of Zurtusht (vul. "Zoroaster"), and became a convert to Christianity. Nūh-shīrwān cast him into prison in consequence; and notwithstanding the tortures to which he was subjected by "The Just" monarch—in this instance sufficiently Unjust—to get him to recant, he would not do so. He held out, and eventually became blind, and totally so, as it was supposed, from the tortures to which he had been subjected; but others say he was blinded by Nūh-shīrwān's command.

To return to the envoy from the ruler of Sind, and the game of chess, Nūh-shīrwān, and the learned men of his court, never having seen anything of the kind before, were, of course, quite unable to understand the game, and were at a loss to explain it. At this time Būzur Jamhir had been deprived of his sight, which Nūh-shīrwān is said to have greatly regretted when too late; but the sage was still in confinement. He was now sent for; and when he entered the presence of Nūh-shīrwān the latter expressed his regret for what had been done. Būzur Jamhir replied : "When a king becomes angry with a servant, it behoveth him to deprive the servant of something or other, in order that, should his sovereign subsequently relent, and show compassion towards his servant, he may be able to restore it to him again; but the blessing of sight cannot be thus restored when once destroyed." Nūh-shīrwān was quite abashed at these words, and felt completely humbled; and the sage continuing, said: "But through the auspicious fortune of the king, my sovereign, a little sight still remains in his servant's eyes." Having expressed his delight at hearing these words from the mouth of the sage and returning thanks to Heaven that he was not totally blind, Nūh-shīrwān had the envoy from the Rai of Sind called in; and when he entered, the chess-men and the cloth were produced for Būzur Jamhir to look at, and to discover, if he could, how the game was played. Būzur Jamhir, after examining the chess-men, said to the envoy : "Come along with me that I may play a game with thee." The envoy accompanied him accordingly; and ranging one half the chess-men on the cloth, he waited to see what Būzur Jamhir would

do. He ranged his chess-men exactly after the same manner; and the Sindī envoy commencing to move, Būzur Jamhir followed him in his moves. He lost the first game, but improved on the second, which was a drawn game, and beat the Rai's envoy in the third, and checkmated him !

The sage subsequently, in the retirement of his prison, improved upon the game of *Nard* or Backgammon. He did not invent it, as some have supposed; for it had been known long before, as I have already shown. But, in former times, before Būzur Jamhir improved upon it, the dice were but two, on each of which were fifteen marks or dots, which being added up made thirty, and the game was single. Būzur Jamhir added one dice more, and five other *mansūbahs* or points, as now used; and when he had completed his improvements, a complete set was despatched to the ruler of Sind, as he had requested. What the upshot of the Rai's challenge was respecting the game of chess has not been recorded.

The names of the seven *mansūbahs* or points in *Nard* or Backgammon, as improved by the sage, Būzur Jamhir, are, 1. *Kād*, which means quantity. 2. *Ziyād*, increase or growth. 3. *Satārah*, veil, curtain, star or fortune. 4. Hazāran, thousands. 5. Khānah-gīr, holder or possessor of the house or compartment. 6. *Tawīl*, long prolix, tall; and 7. *Mansūbah*, plan, project, scheme, or game.

The Arabian prophet, Muḥammad, was born in the fortieth year of the reign of the Kisrā, Nūh-shīrwān; and the historian, Abū-l-Fazl-i-Baihakī, previously quoted, who states that Būzur Jamhir had become a Christian, says, that the sage, shortly after these events, died from the effects of the ill-treatment he had been subjected to; and that a year after his death, Nūh-shīrwān himself, "departed to the Fire-Temple below," after a reign of forty-seven years, when Muḥammad was in his seventh year, 576 A.D. He died a natural death, and was never deposed, as Gibbon tells us; but his son and successor, Hurmuz, was.

The pieces in the game of chess were, at first, wooden figures having the human form; and what is known now as the King, was then called Shāh Bādshāh, from Shāh son of Rai Bhalīt. The Castle or Tower of the present was then styled the Rukh, after that fabulous bird, as before mentioned; the Bishop of the present day, was then the Fīl or Pīl (f and p are

permutable) or Elephant, and was sometimes called the Camel; the Knight or Chevalier was known as the Faras, or Asp, signifying a Horse; the Queen was styled Farz, or Farzīn, or Farzī, or Farzān, and also Wazīr or Minister; and the Pawn or Foot-soldier or Common Man, was called Piyadah as those words signify. "Shāshdār" means "Confounded," "Distressed," "Astonished," "Useless for a square," "Tied up;" and "Shāh Māt," as before mentioned, means "Shāh Bādshāh, or Shāh, the King, is reduced to the last extremity, conquered," etc.

The names used in India differ somewhat, most of them being derived from the Sanskrit language.

The wise and accomplished Khalīfah, Al-Māmūn, son of Harūn-ar-Rashīd, composed some lines on chess, which literally are as follow :

"Upon a square of red-dressed leather,
Two friends, for generosity well-known,
Re-call war to mind, and thereon stratagems invent.
Without the guiltiness of shedding blood therein,
This assaults that, and that assails this;
And the eye of vigilance sleepeth not.
Behold the ingenious foes ! how skilfully they move
Between two hosts, without banner or drum."

NOTE ON VIṢṆUPUR CIRCULAR CARDS

HARAPRASĀD SHĀSTRĪ

A pack of the circular Viṣṇupur Cards consists of 120 pieces, divided into 10 groups of 12 each. The groups are named after the ten incarnations of Viṣṇu; *viz:*— (1) the Fish, (2) the Tortoise, (3) the Boar, (4) the Man-lion, (5) Buddha, (6) the Dwarf, (7) Paraçurāma, (8) Rāma, (9) Vala-rāma, (10) Kalkī. The first five of these incarnations have four hands, and the other five two hands. The kings, or rather the *Avatāras*, are distinguished from their ministers by having two attendants and being set in a 'room' or frame. The ministers are represented by the *Avatāras* without these accompaniments. Besides kings and ministers there are ten plain cards in each group, with one to ten 'pips' on each. In groups presided over by four-handed *Avatāras* the highest value is given to the ten, and so downwards, the ace having the lowest value. In groups presided over by two-handed *Avatāras*, the reverse order prevails, the ace being the highest card and the ten the lowest.

Of all the incarnations Rāma is regarded as the most powerful; and he wins in a group of five players ten cards, two from each player, as explained below.

The minor cards of the Fish incarnation are marked with fish, those of the Tortoise with tortoises, those of the Boar with conches, those of the Man-lion with discs *(chakra)*, those of Buddha with lotuses, those of the Dwarf with waterpots *(kamaṇḍalu)*, those of Rāma with arrows, those of Bala-rāma with clubs, and those of Kalkī with swords.

The number of players is five. The pack is first shuffled by the dealer, and the cards are cut by the right hand player. The dealer deals four cards at a time, beginning with his right hand player, and six rounds are dealt. If there is no misdeal, that is, if all the five get 24 cards each, the play commences; if not there is a fresh deal.

The player who has got Rāma leads. He plays along with Rāma a plain card, and such is the power of Rāma that he

wins both the tricks, that is ten cards. He has the privilege of leading again or ordering some other person to lead. Whoever wins always enjoys this privilege of either leading again or calling a lead. As long as there are kings and ministers in the leader's hand they must be played. After the kings and ministers of a hand are exhausted, plain cards may be led, though other players may have kings and ministers in their hands.

After the game is over the cards of each player are counted. The player who has more than 24 cards, gets one pice, or one anna, or one rupee, according to the stake, for each card above 24; and one who has less than 24, pays at the same rate.

ANTIQUITY OF THE GAME

Tradition has it that the Malla kings of Viṣṇupur invented this game when they were in the zenith of their glory. The Malla Rājās have left behind them an era of which 1201 corresponds to 1895 A.D., and I fully believe that the game was invented about eleven or twelve hundred years before the present date. The reasons for my supposing so are these:

(1) In the orthodox list of the ten incarnations Buddha's place is the ninth. But in the order of the cards, he has the fifth place assigned to him, or rather, he is one of the first five, having four hands. The antiquity of the orthodox list goes back to Jayadēva in the 12th and to Kṣēmēndra in the 11th century. These cards must therefore have been invented before the formation of the orthodox list, at a time when Buddha was regarded as an incarnation, but held a place in the list different from that now assigned to him. The reason for giving him the fifth place may be well surmised. Buddha, as represented in the card, is an unformed mass, with only a human head and human hands. He may, therefore, very well come between the Man-lion, which is half man and half animal, and the dwarf, who is a complete man, but not fully developed. And so in the gradual development from the lowest animal to the most fully developed human being, as represented in the list of incarnations, Buddha may very well occupy the fifth place.

(2) The plain cards of Buddha are represented by lotuses.

The cards must therefore have been invented when Buddha was known as *Padmapāṇi*, and the lotus was the most striking of his emblems; and this was when the Mahāyāna School was in the ascendant in Bengal, that is, during the reign of the Pāla Kings from 800 to 1200 A.D., or a little earlier. I do not think there are three Bengalis, at the present moment, who can explain why the lotus is depicted on the minor cards of Buddha.

A SECOND NOTE ON VIṢṆUPUR CIRCULAR CARDS

HARAPRASĀD SHĀSTRĪ

Paṇḍit Haraprasād Çāstrī exhibited a second set of Viṣṇupur Circular Cards and read the following note.

A single pack contains forty-eight cards, in twelve groups of four each. The first four have each a figure, which though apparently a female figure, on closer examination appears to be the figure of a Malla king dressed in female attire. This is the Ace. The second four have two-wrestlers. These are valued at two. The third four have three leaves. The fourth four have four conch shells : the fifth, five flowers; the sixth, six carpet cushions; the seventh, seven swords, the eighth eight *Bakula fruits*; the ninth, nine full blown flowers; the tenth, ten plums. The eleventh four have each a horseman and the twelfth each an elephant rider. They are valued at 11 and 12 respectively.

The point of the game is this. He who gets the number seventeen first in a group of four players, wins the stakes. The cards are first shuffled then cut by the right-hand man, and one card is dealt to each player from right to left. Then the right-hand man is given another card. If he gets more than seventeen he loses the stakes and throws away his cards; if he gets seventeen he wins; if he gets less, he has the option of either demanding another card or allowing cards to be given to others. If nobody gets seventeen, nobody wins. If a man gets two horses, two elephants, two aces and two twos, he also wins.

Some of the designs in this pack are the same as in the Viṣṇupur Circular Cards already described in *Journal*, Part I, p. 284. But others are not. The elephant rider, the horseman, the wrestlers and the king in the Ace remind one of the Aśvapatis, Gajapatis and Narapatis Rājyatrayādhipatis so often mentioned in the inscriptions of the twelfth and thirteenth centuries.

NOTES ON "PACHESI" AND SIMILAR GAMES, AS PLAYED IN THE KARWI SUBDIVISION, UNITED PROVINCES

E. DE M. HUMPHRIES

A feature which cannot fail to strike the most unobservant visitor to the Karwi Subdivision is the village meeting-place.

This is usually furnished with a number of rude stone benches, formed by a horizontal, supported on two vertical slabs. These are arranged roughly either in a circular or in a square formation, reminding one of nothing so much as the remains at Stonehenge. On the surface of these slabs will often be found scored the "boards" of certain games.

During the tour season of 1904-5, I collected the rules of some of these games, so far as I was able to ascertain them in the very limited time at my disposal.

The following notes, which have no claim to be considered exhaustive, embody the substance of the information so obtained.

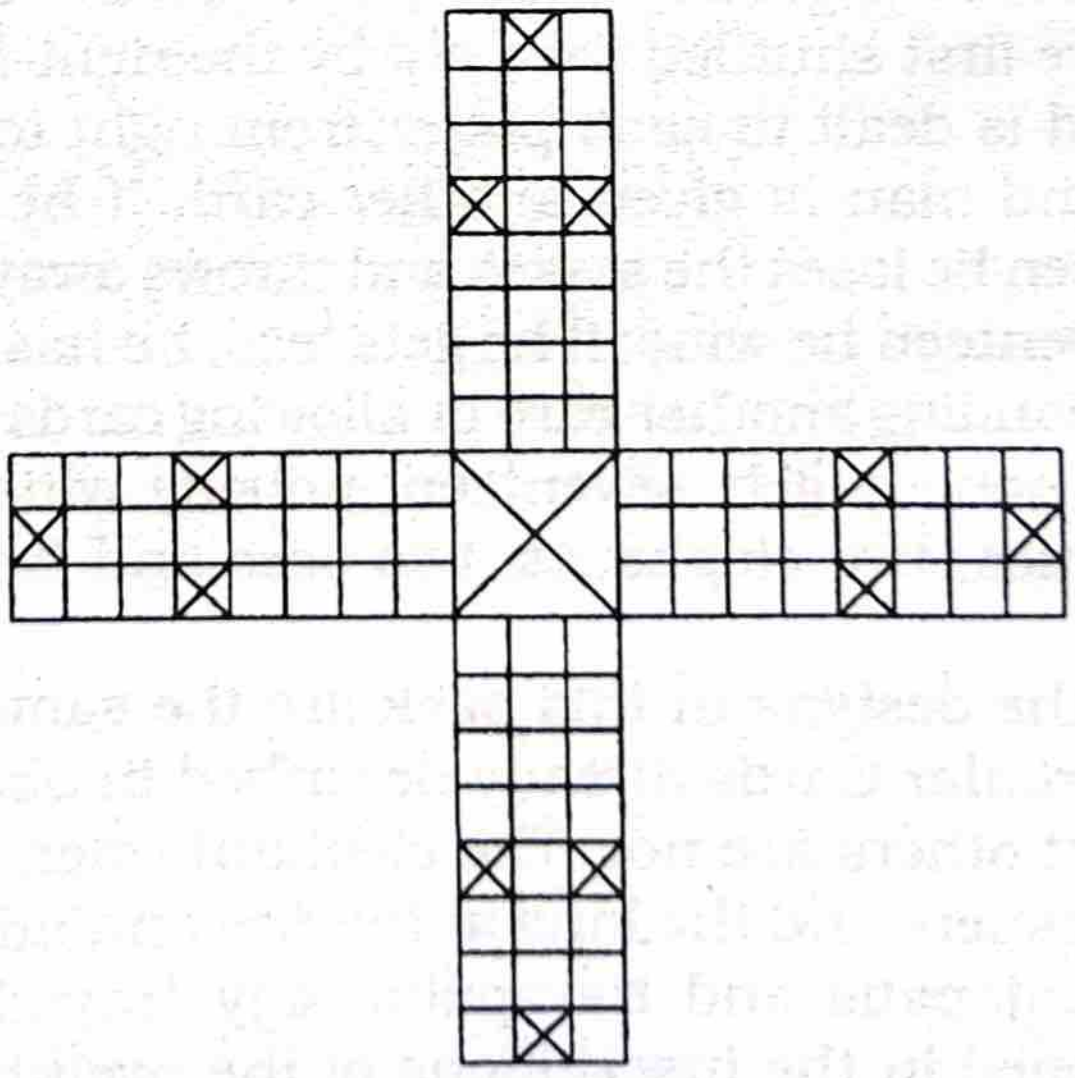

Fig. 1.

PACHESI

The most familiar of these games is that known as "Pachesi."

It is played on a board marked out as in the diagram (Fig. 1).

Each arm of the cross is divided into three rows of eight squares. Of these the fifth from the end of each of the outer rows, and the middle square of the bottom row are marked with a diagonal cross to indicate that a piece on one of these squares is safe from capture.

The game is played by four, but may equally be played by two, or even by three persons, each of whom has four "men", distinguished by their colours or their materials.

Each player sits opposite one arm of the cross, and his object is, starting from the centre of the board down the middle and up the left-hand row of his own arm of the cross, to move his four "men" all round the board, finally bringing them down the righthand side and up the middle row of his own arm and landing them in the triangular space in the centre.

The first to do this wins the game.

The moves are regulated by the number of cowries which fall with the slit uppermost out of seven, which are thrown from the hand without the use of any dice-box. The following table gives the value of the various throws :

If all 7 cowries fall with the slit uppermost, the throw counts	*12*
" " 6 " " " " " "	30
" " 5 " " " " " "	25
" " 4 " " " " " "	4
" " 3 " " " " " "	3
" " 2 " " " " " "	2
" " 1 " " " " " "	10
If no cowry falls " " " "	7

A "man" may be placed on the board only when either 10, 25 or 30 is thrown.

When a "man" is so started, he is placed on the square corresponding to the number thrown, counting down the middle and up the left-hand row.

Once a "man" has been started, every throw can be utilised by pushing on a "man" for a number of square corresponding to the number thrown.

If the square to which a "man" should be moved is occupied by one of the adversaries' "men," the latter is captured

and must be removed from the board and begin its round exactly as if it had never been placed on the board at all. A piece is exempt from capture while on one of the refuges marked on the board with a cross, or when it has turned into the middle row on his way home. A player may not take one of his own "men" past a refuge occupied by one of the adversaries pieces.

When a "man" reaches the middle row he cannot get "home," unless his player happens to throw exactly the number required to bring him there.

For instance, to a "man" placed on the fourth space from "home", a throw of 5 or more is of no use : a throw of 4 would bring him "home," while throws of 3 or 2 would not improve matters, though, if there were no other "men" on the board that he could move, such a throw would have to be utilised by moving the "man" up accordingly.

When a "man" reaches the last square of all, he has to wait till either 10, 25 or 30 is thrown. When one of these numbers is thrown, the player has to throw again, and, if one of these numbers is again thrown, the "man" has to be removed and begin again from the beginning.

The word for "throwing" the cowries is '*pakkána*' : *i.e.* to "cook" them.

The above represents what I understand to be the rules of the game as ordinarily played. There are, however, variations in the rules, some of them too complicated to be understood in the very short time at my disposal. For instance, I was informed in one village that, if in the course of the game, after all the pieces were on the board, 10, 25 or 30 were thrown, the player did not move, but threw again. If any of the above numbers were again thrown, he had to throw a third time. If they did not turn up, he added the amount of the second to that of the first throw and moved accordingly. If, at the third throw, one of the three magic numbers again turned up, the whole score was cancelled, but he had another throw.

Should, however, either 7 or 14 turn up, then the whole score could be counted. In that village, if all the seven cowries fell with the slit uppermost, it counted 14, and not 12 as given above. It is not unlikely that my original informants were wrong in this particular.

CHONPA

Another variant is known as "Chonpa" or "Chaunsarh."

It is played by four persons, each having four "men," coloured respectively black, yellow, green and red. The two former play in partnership against the two latter colours.

The board is the same as that already described, with the exception that the refuges mentioned in the case of "pachesi" are either not marked at all or are disregarded, if the board is one made for both games. A single piece may, and a pair may not, be captured on any square to which a hostile piece may be moved.

The moves are regulated by throwing three dice : not, as in the case of Pachesi, cowries. These dice are of bone or ivory and are about 2½ inches long, marked on their long sides with the numbers (1), (2), (5) and (6).

They, too, as is usual in this country, are thrown from the hand, without the use of a dice-box.

The "men," known as *mard*, or *got*, are placed as follows:

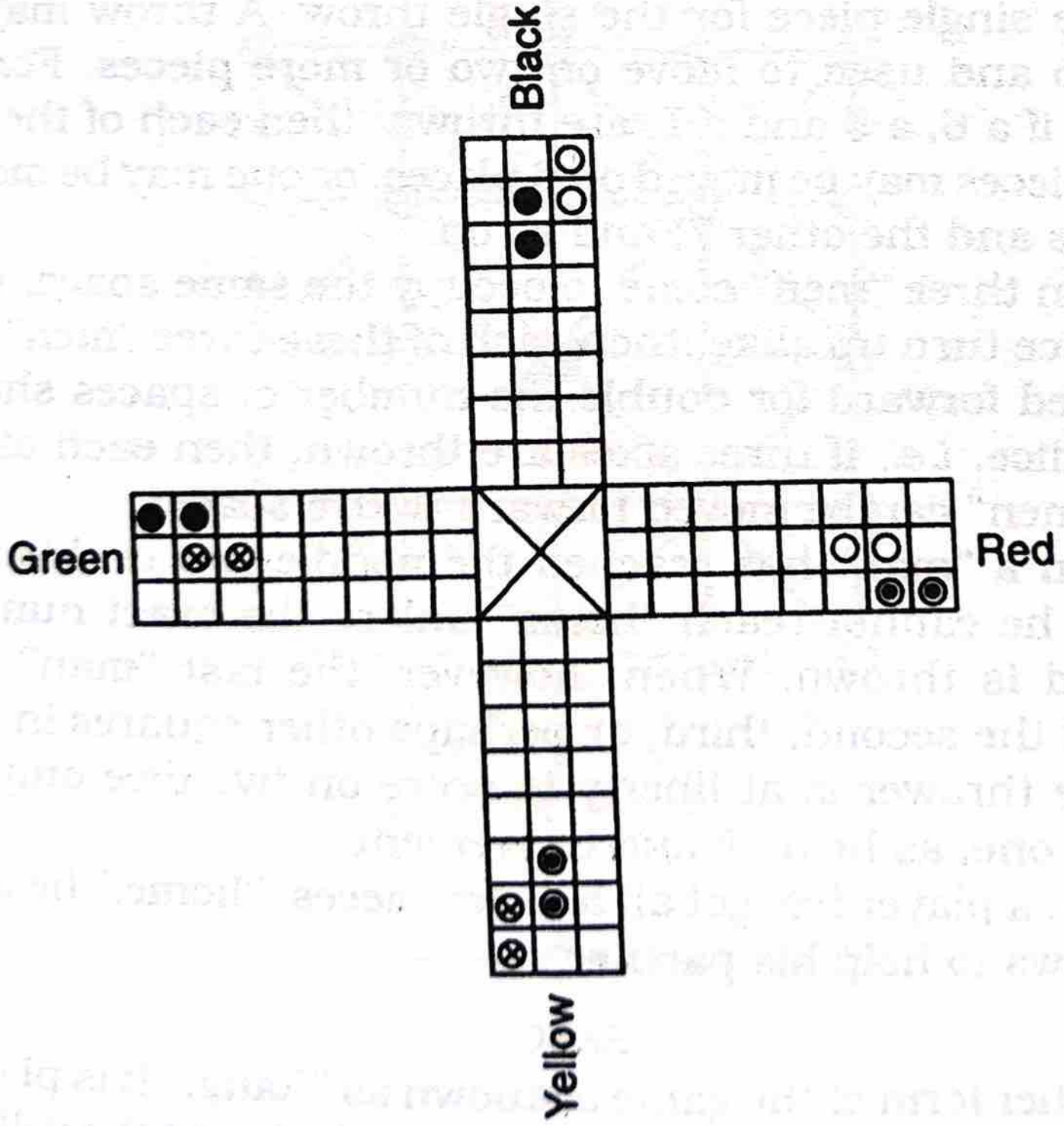

Fig. 2.

On the arm of the cross occupied by the player who has taken the yellow "men," are placed two yellow "men" on the second and third squares from the bottom of the middle row, and two green "men" on the first and second squares of the left-hand row respectively. Similarly on the arm of the cross to the right of him are placed two red and two yellow "men": on the arm opposite his, two black and two red "men" and on the arm to the left of him, two green and two black "men." This will be more clearly understood from the accompanying diagram (Fig. 2) which shows the board set out for the commencement of this game.

The first two "men," *i.e.*, those which occupy the first two squares of the left-hand row on the adversary's arm of the cross, always move in pairs, while the last two move singly. A pair may be moved only when a pair is thrown. If the dice all turn up different, then only one, or possibly both of the single pieces may be moved for a total number of spaces corresponding to the total thrown. If two out of the three dice fall alike, then the pair may be moved for the pair thrown and the single piece for the single throw. A throw may be split up and used to move on two or more pieces. For instance, if a 6, a 5 and a 1, are thrown, then each of the two single pieces may be moved on 6 places, or one may be moved 5 places and the other 7, and so on.

When three "men" come to occupy the same space, if all three dice turn up alike, then each of these three "men" can be moved forward for double the number of spaces shown by the dice. *i.e.*, if three sixes are thrown, then each of the three "men" can be moved forward twelve spaces.

When a "man" has reached the middle row on his way "home" he cannot reach "home" unless the exact number required is thrown. When, however, the last "man" has reached the second, third, or perhaps other squares in this row, the thrower is at liberty to score on two dice only, or even on one, as he may find convenient.

When a player has got all his own pieces, "home," he uses his throws to help his partner.

RANG

Another form of the game is known as "Rang." It is played by two persons. Of these one takes the black and the yellow: the other, the green and the red. They sit opposite each other

and each takes two arms of the board. Whichever colour a player starts with, he must get all the men of that colour "home" before starting those of the other colour.

AHTARAH GUTTI

Far more common, however, even than Pachesi is the game known generally as "Ahtarah Gutti" and also as "Bazi Mar," "Tichha" or "Bangala."

It is played on a board of 37 spaces, arranged as in the accompanying diagram (Fig. 3).

Each of the two players has 18 "men," represented, as usual, among the thrifty villagers, by pieces of kankar on

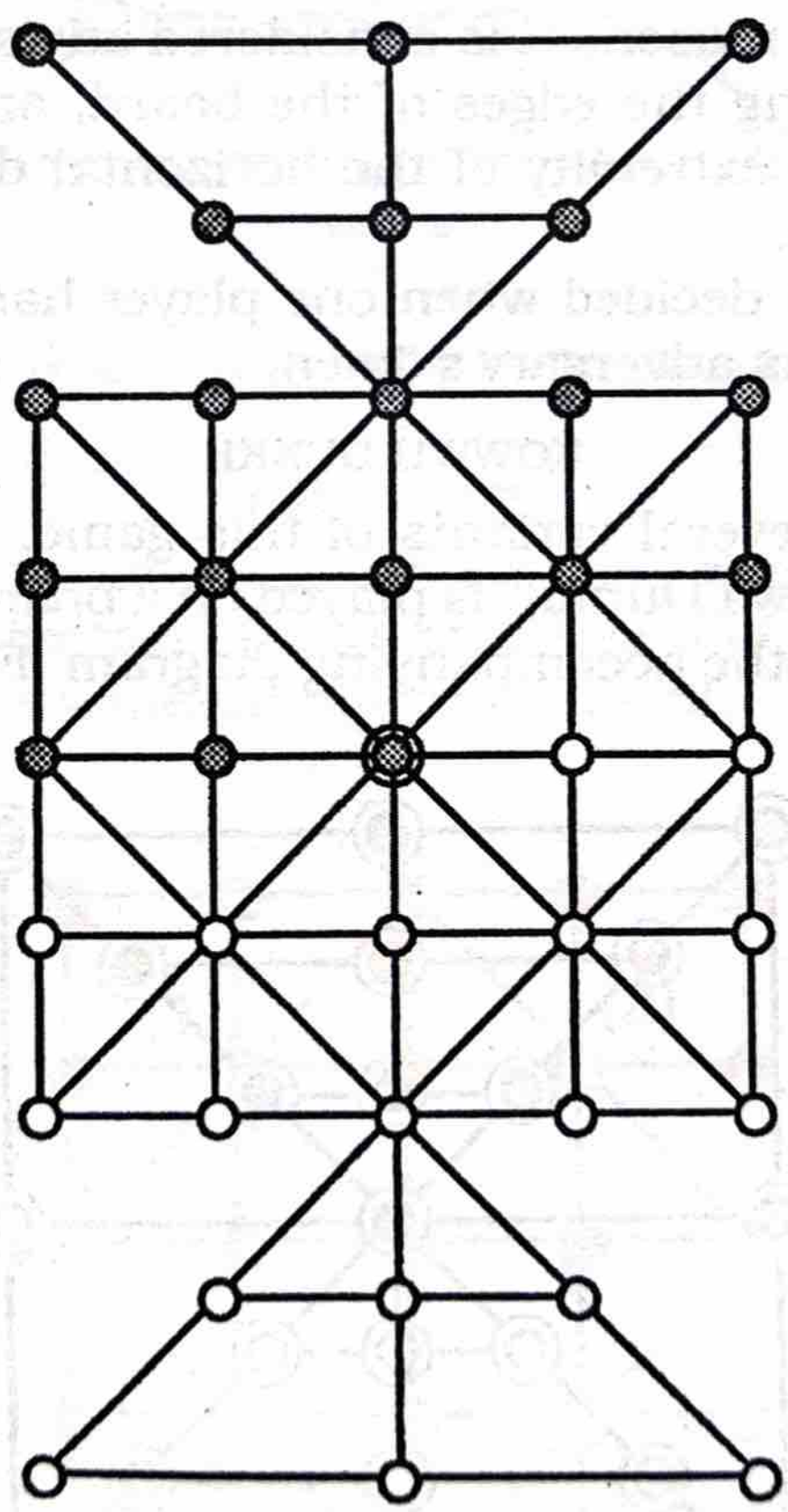

Fig. 3.

the one, and of tiles on the other side. The middle space is

left vacant, and the player having the first move must move a "man" on to that space.

The moves are much the same as those of a king in draughts, *i.e.*, a piece can be moved one space at a time in any direction, backwards or forwards, provided that the space to which it is sought to move it is vacant and is in the same rank, file or diagonal as that from which it starts. Captures are made, as in draughts, by leaping over the piece to be captured in any direction, provided that all three spaces are in the same straight line. Any number of pieces may be captured in succession in one move. In no part of the board is a piece safe from capture : not even in its own bungalow, as the triangular excrescences at either end of the board are called.

For obvious reasons it is considered advisable to occupy the spaces along the edges of the board, and particularly those at either extremity of the horizontal diameter of the original square.

The game is decided when one player has succeeded in capturing all his adversary's "men."

KOWWU DUNKI

There are several variants of this game. Of these, one, known as "Kowwa Dunki," is played on a board of 21 spaces, arranged as in the accompanying diagram (Fig.4)

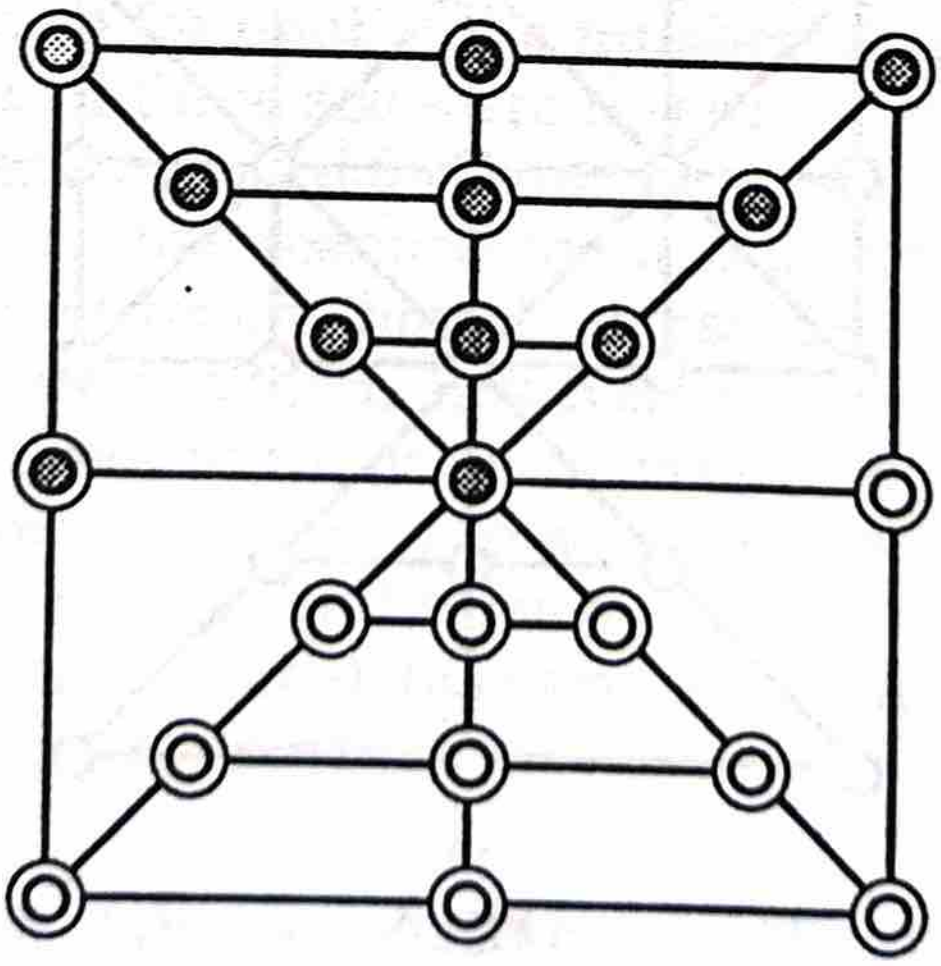

Fig. 4.

The same game is played at Bargarh oni a slightly different board as shown in the accompanying diagram (Fig.5).

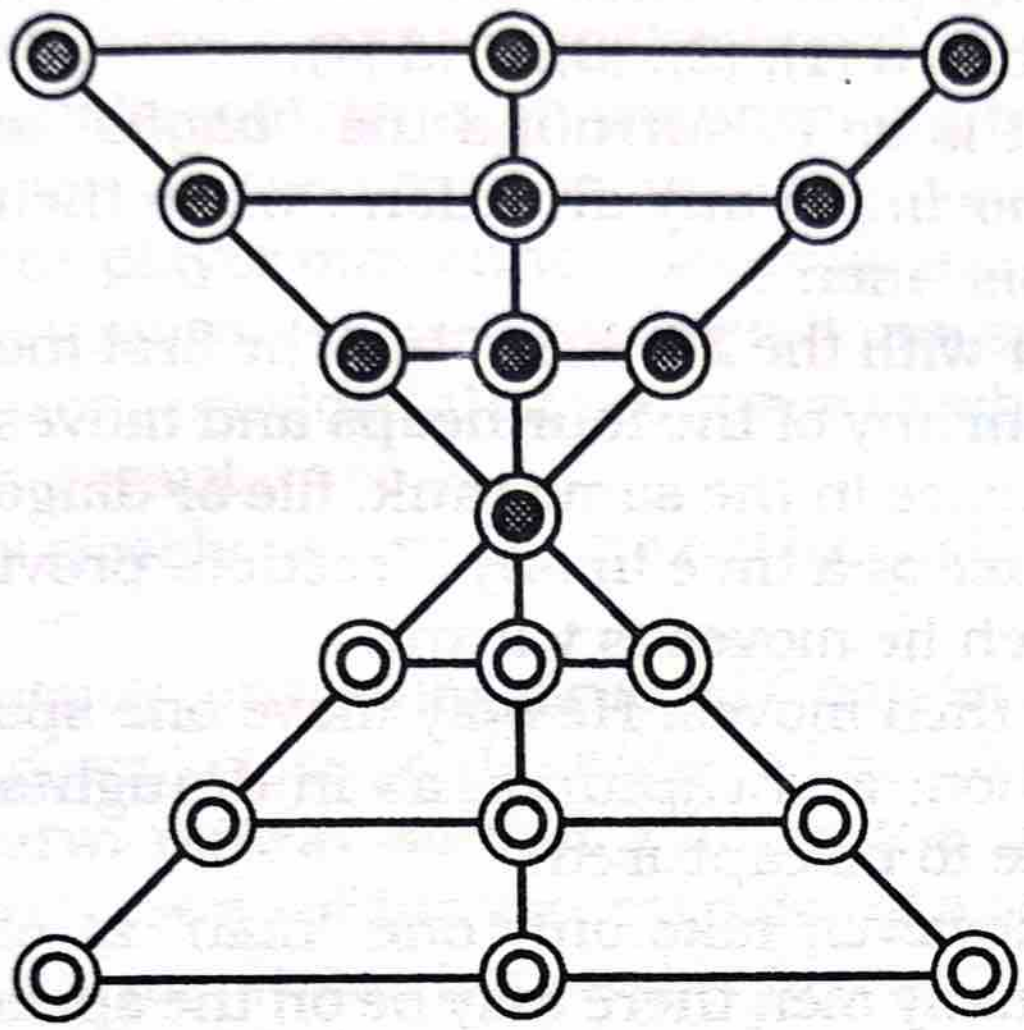

Fig. 5.

The rules of both these games are the same as those of Ahtarah Gutti.

BAGH GUTTI

Yet another variant is that known as "Bagh Gutti."

It is played by two players on a board of 25 spaces, arranged as in the annexed diagram (Fig. 6).

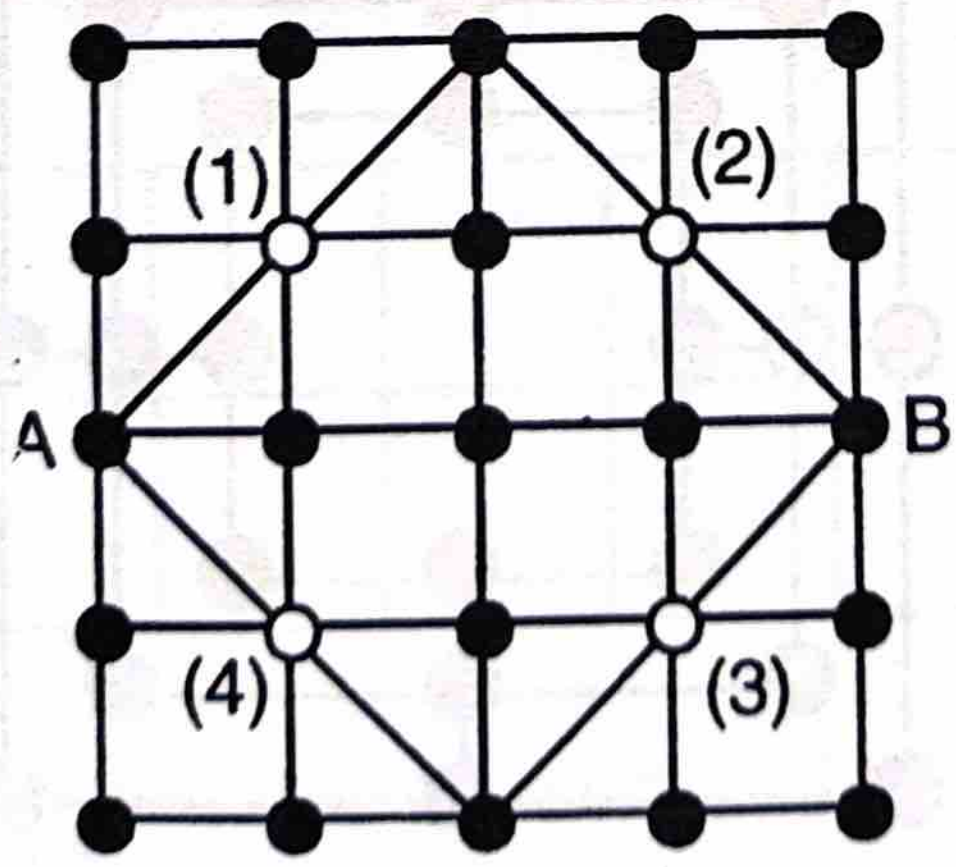

Fig. 6.

On A and B are placed two large pieces, usually of kankar or tiles. These are called *bagh* ("tigers"). The other player has 20 smaller pieces. These he places, five on each of the spaces numbered (1), (2), (3), and (4).

His object is so to surround the *"baghs"* as to prevent them from moving in any direction : while their object is to capture all his "men".

The player with the 20 "men" has the first move. He takes one piece from any of the four heaps and moves it on to any contiguous space in the same rank, file or diagonal. He may move one space at a time in any direction, provided that the space to which he moves is vacant.

The *bagh* then moves. He may move one space at a time in any direction, and captures, as in draughts, by leaping over the piece to be captured.

He can, however, take only one "man" at each leap, no matter how many men there may be on the space over which he leaps. He may capture any number of "men" in succession.

SUJJUA

Another very popular game is that known as "Sujjua."

It is played on a board of 24 spaces, as in the annexed diagram (Fig. 7).

There are two players, each of whom has nine "men." The

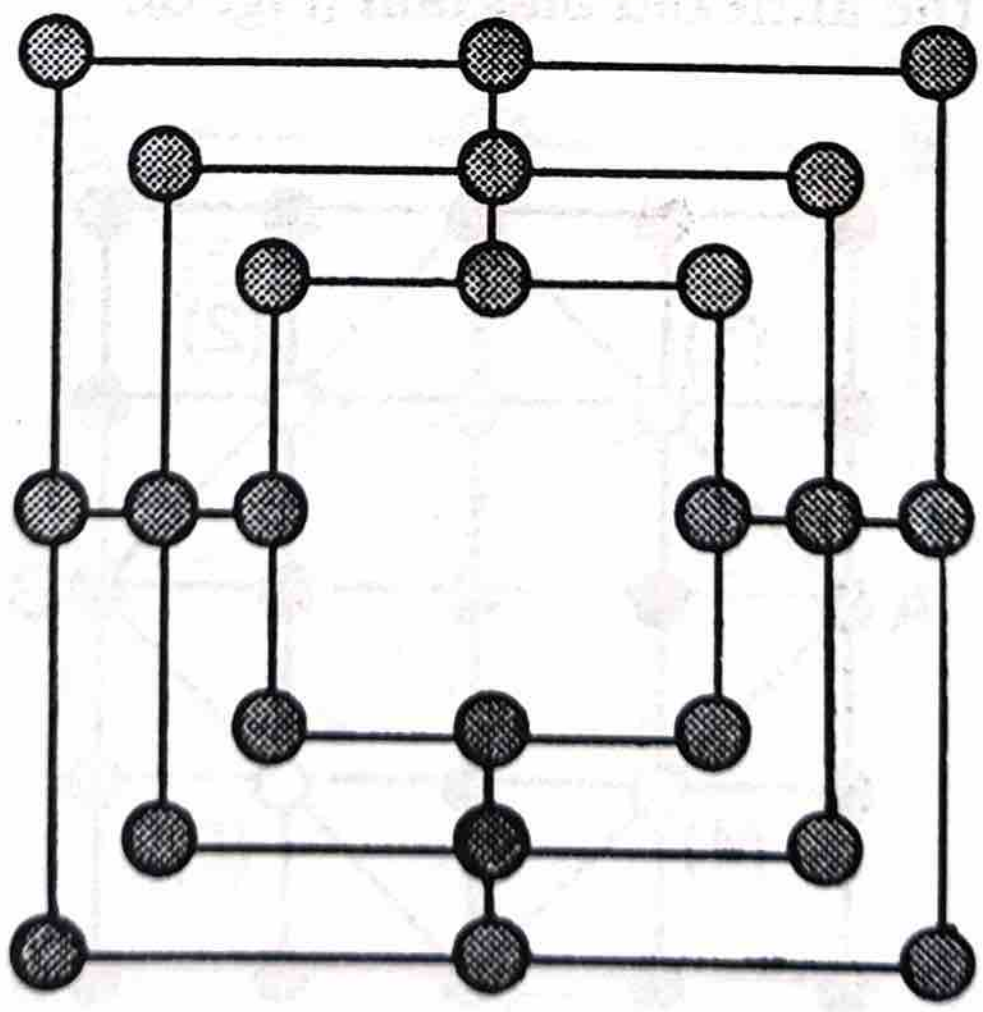

Fig. 7.

latter are usually represented, on the one side by pieces of

kankar; on the other side by pieces of brick or tile.

The object of each player is to get three of his own "men" in a row, before his adversary can succeed in doing so.

When the game commences the board is clear and the players move alternately, each commencing by placing one of his own men on the board in any vacant place. After the first move, the player may either place another "man" on the board, or may move a piece already on it one space at a time in any direction, provided that the space to which he wishes to move it is vacant.

This very closely resembles the old English game of "Nine Men's Morrice."

Quite recently, on visiting a ruined Chandel temple known as the "Baldewa" close to the railway line, about two miles from the Karwi railway station, I found the "board" of this game marked on one of the vertical sides of a slab in the wall of the inner shrine. It was impossible to resist the conclusion that the game had been played on that stone before it had been used for the building of the temple.

PACHGARHWA

Another game, which appears to be more popular than its intrinsic interest would seem to merit, is known as "Pachgarhwa."

It is played by two persons, who take opposite sides of a board of ten spaces, arranged as in the accompanying diagram (Fig. 8).

The game commences by each player placing five pieces

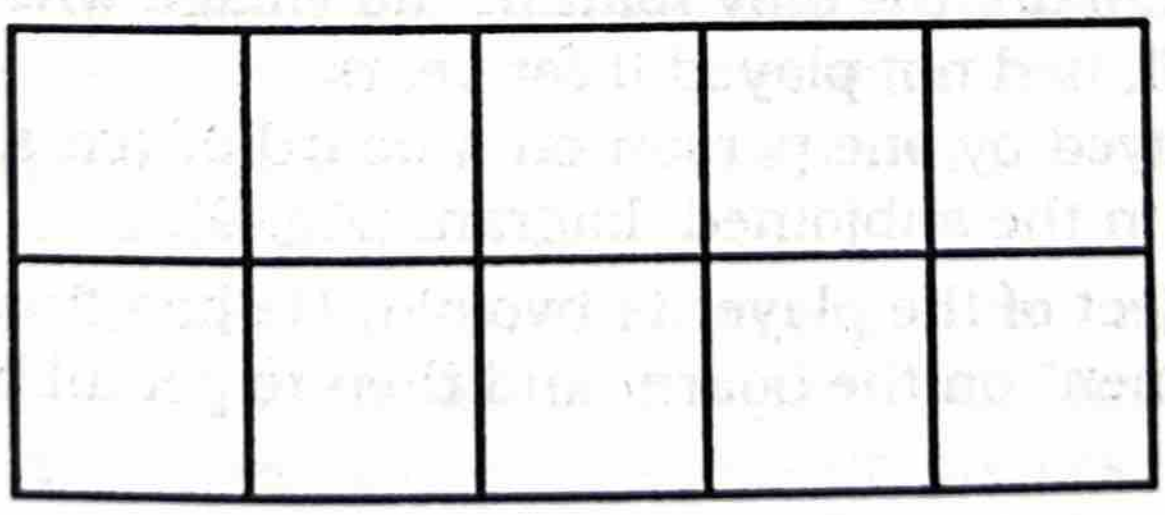

Fig. 8.

of kankar or similar material on each of the five spaces on his side of the board.

There is no distinction in size, colour or material between the "men" of either player.

When the board has been thus set out, the player whose turn it is to move takes up the five pieces from any one of his spaces and proceeds to work round the board from the space to the right of that from which he has just taken the pieces. He drops a piece on each space, whether of his own or his adversary's, as he proceeds.

When he has thus exhausted his five "men," he takes up the pieces on the sixth space and continues the process, until he happens to deposit his last "man" on a space, the next in order to which is vacant. When this occurs, he takes as many pieces as may be on the space immediately beyond the vacant one. His turn then is over, and his adversary proceeds to move in the same way, but in the opposite direction.

Thus the game, which is well-nigh interminable, goes on until all the pieces on the board are exhausted. Even then it does not stop, but begins again by each player filling up as many spaces as he then has multiples of five in his possession. If one player has, say, three, and the other two "men" over, then each has an interest in one square proportionate to the number of pieces placed by him on it.

By that time things began to get complicated and I was unable to discover how, if ever, the game did end.

KOWWA DAND

There remains a kind of "Solitaire," known as "Kowwa Dand."

I had great difficulty in learning the rules of this game, as the man who gave me the diagram had forgotten them, and the *patwari*, the only man in the village who knew the game at all, had not played it for years.

It is played by one person on a board of ten spaces, arranged as in the subjoined diagram (Fig. 9).

The object of the player is twofold. He has first to get all his nine "men" on the board, and then to get all but one off again.

The moves allowed are as follows :

(1) When placing the "men" on the board, they may be moved from any one space to the next but one in the same straight line, provided that it be vacant. It is permissible to leap over an intervening "man."

(2) When removing the pieces from the board, they are taken, as in draughts, by leaping over the piece to be captured on to a vacant space in the same straight line.

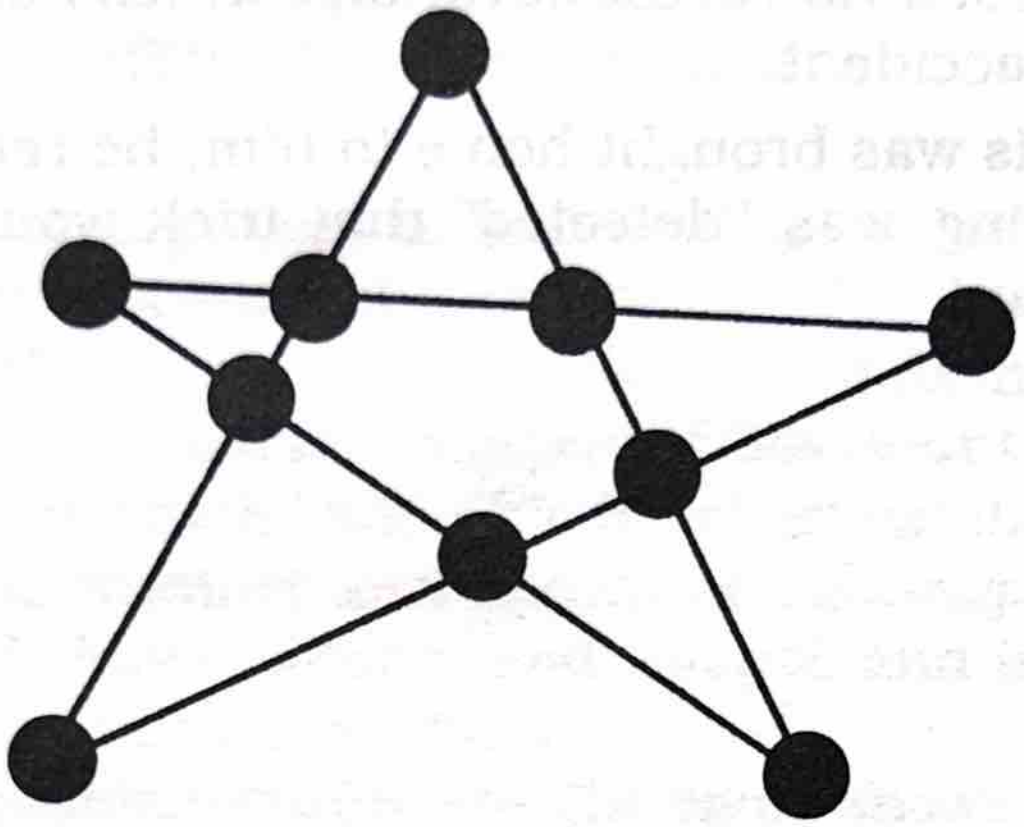

Fig. 9.

RANG MAR

Although I have not given much time to the study of card games, yet there is one such game played in the subdivision, which deserves mention. It is known as "Rang Mar."

It is played by three persons with an ordinary pack of cards.

The two of diamonds is taken out, in order that the pack may be divisible by three, and the cards are then dealt out to each player as in whist. The player who happens to hold the ace of spades must play it, and each of the others must follow suit, if possible.

After this forced lead, which, of course, wins the trick, as the ace is, for the purposes of this game, the highest card, the leader may open any suit which he prefers. The game then proceeds very much as when "No Trumps" are declared at bridge. Each player plays for his own hand alone, and the game is decided by the number of tricks scored.

"Points," I presume, are settled by mutual agreement before commencing to play.

I asked my informant what was the penalty for a revoke. He did not understand this at first, but when a pack of cards was produced, I showed him how, quite by accident, of course, such a thing might happen.

He had evidently not given the subject much thought and was not at first aware of the advantage which might be gained by such an accident.

When this was brought home to him, he remarked that, if such a thing was "detected" that trick would not be allowed to count.

A FEW TYPES OF SEDENTARY GAMES PREVALENT IN THE CENTRAL PROVINCES

HEM CHANDRA DAS GUPTA*

While out on a geological tour during last autumn, I collected an account of a few types of sedentary games prevalent in the Jubbulpur district, the information being gathered chiefly from a few villagers of Gosalpur (Jubbulpur). The plays about which I was able to collect detailed information are five in number and known as *Atharagutiala teora, dash-guti, gol-ekuish, kaooa,* and *Sat-gol,* and in this short note I propose to describe them.

1. *Atharagutiala teora* (fig. 1)—The figure shows the diagram

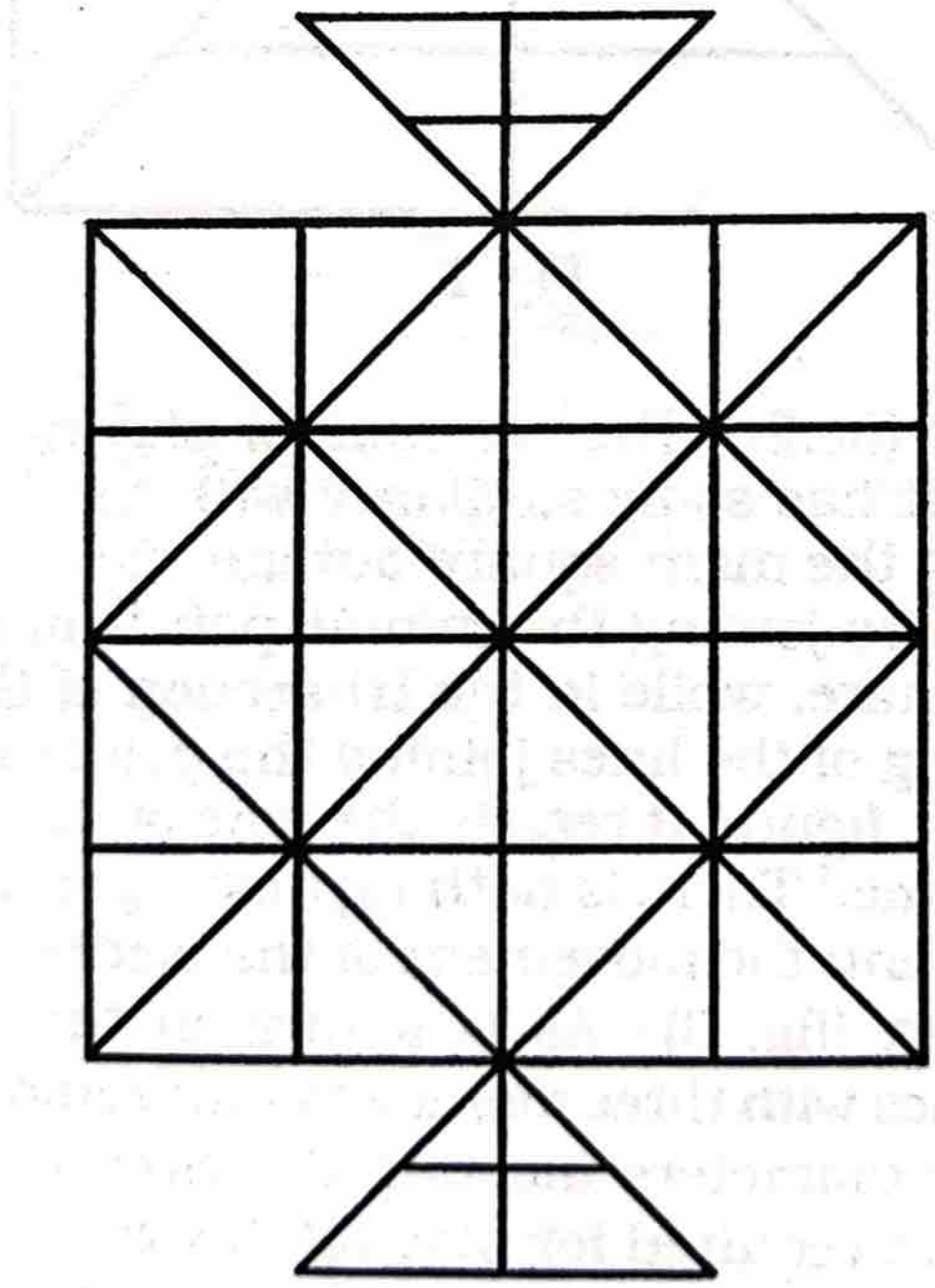

Fig. 1.

* Hem Chandra Das Gupta, M.A., F.G.S. was a geologist by profession and most of his field work on sedentary games was done during his geological tours.

that is used in playing this game. It is of the same type as the *bara-guti* found in the Punjab, a description of which has already been published.[1] Same rules are observed in both these games, while the chief distinction between them lies in the fact that the two triangles found in the diagram of *Atharagutiala teora* are non-existent in *bara-guti*.

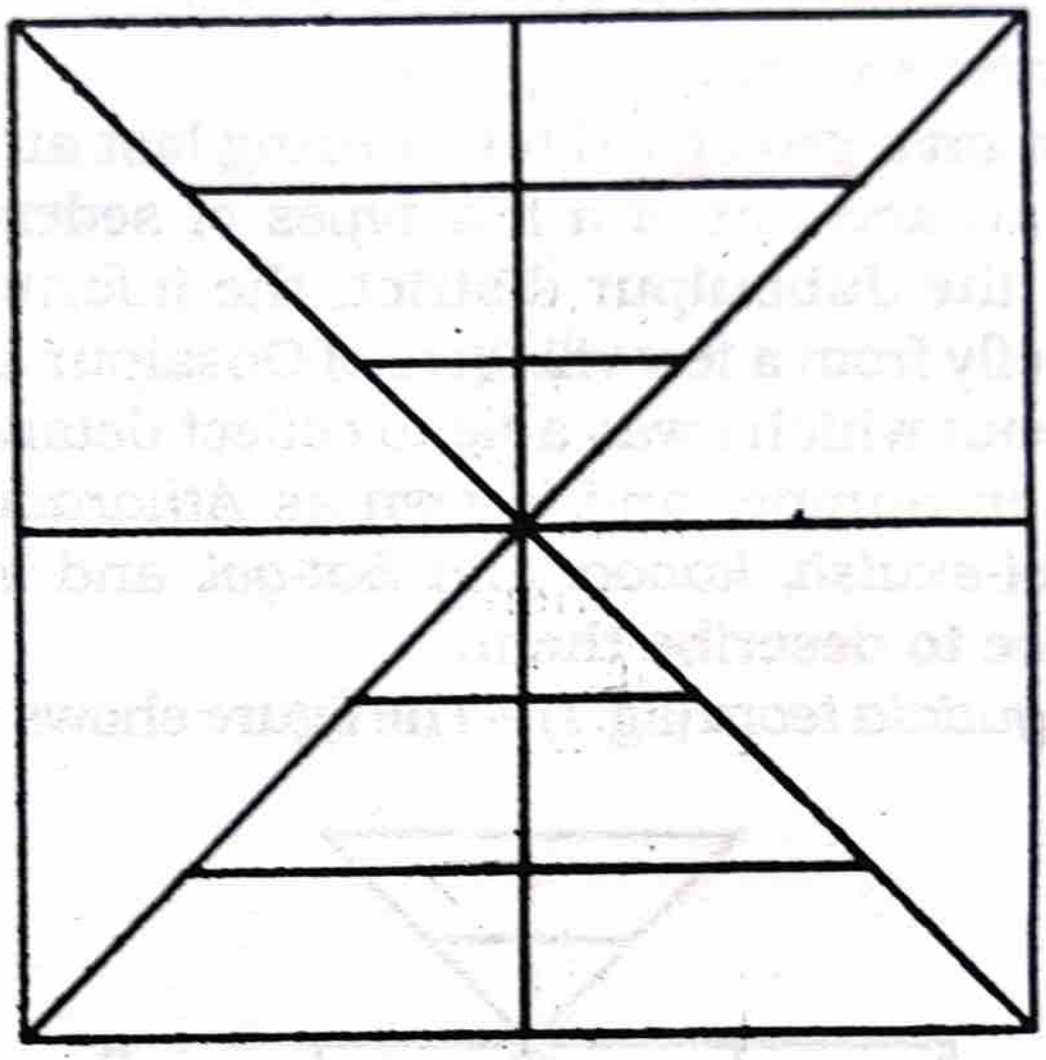

Fig. 2.

2. *Dash-guti* (fig.2)—The diagram for playing this game is shown above. It has some similarity with the *bara-guti* diagram in having the main square outline, the two diagonals, and the two lines joining the middle points of the opposite sides of the square, while in the tri-section of the diagonals and the drawing of the lines joining the points of tri-section as shown in the figure, it recalls the type of diagram used in a Bhandara game.[2] There is nothing new regarding the number of capture and the movement of the pieces.

3. *Gol-ekuish* (fig. 3)—As is shown in the figure seven concentric circles with three diameters are required for playing this game, the diameters meeting the circles at 42 points. Two persons are required for playing this game, and each of them provides himself with 21 ballets which are placed at the 21 cross-points arranged along 3 consecutive radii. The

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1 Calcutta Review, March 1923, pp. 510-513.

2 For a summary of the paper describing this game see Proceedings of the Tenth Indian Science Congress, p. 235, 1924.

rules of the game are practically the same as are observed in the case of *bara-guti* or similar other plays, the only important

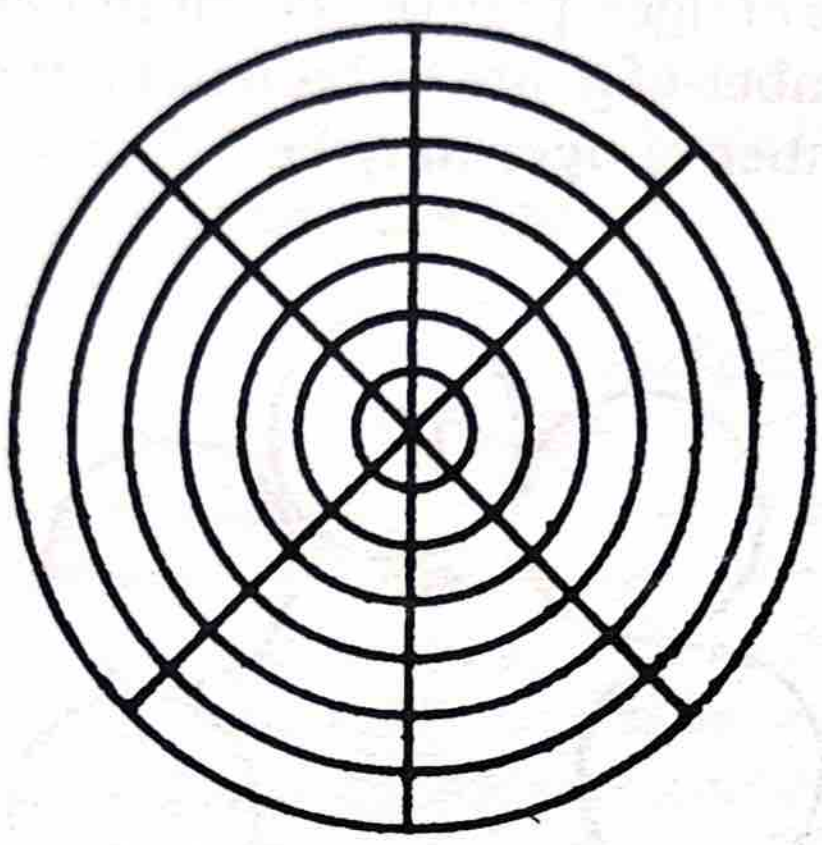

Fig. 3.

point to be noted is that in this game ballets may be moved not only along the radii or diameters, but also along the arcs or the circumferences. The ballets belonging to the 2 players are necessarily of two different types.

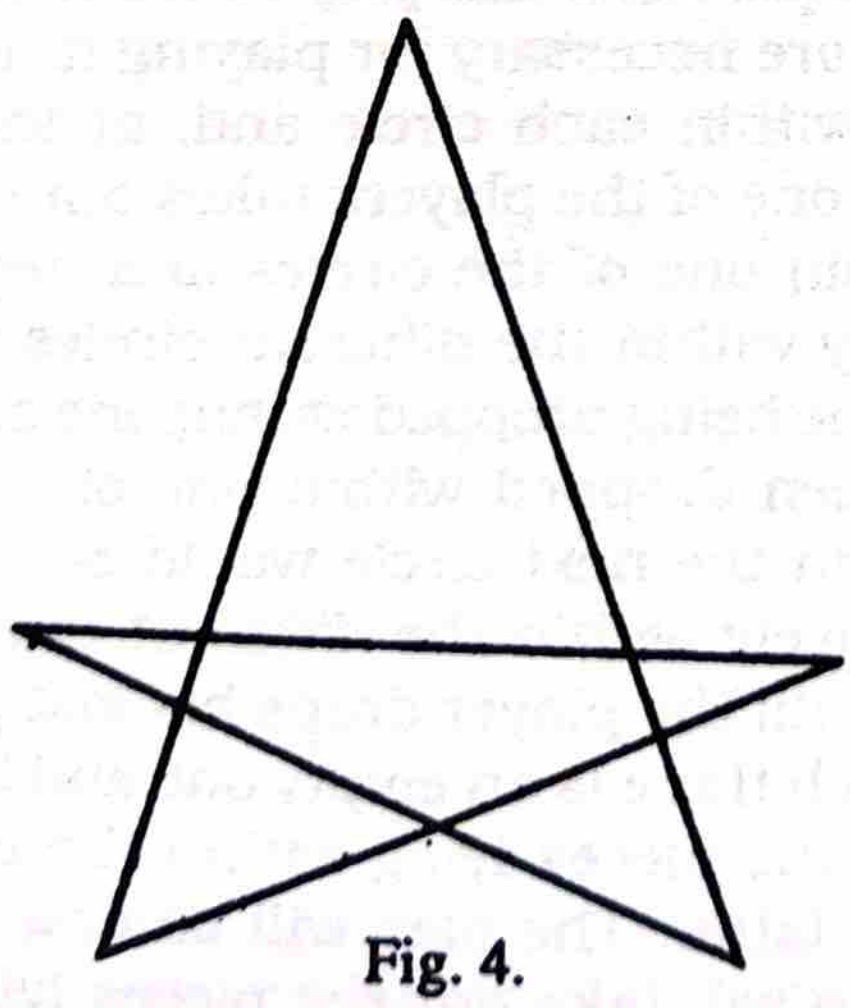

Fig. 4.

4. *Kaooa* (fig. 4)—This is a peculiar type of tiger play and

as the figure shows it, seven *kaooas* and one tiger are necessary for the game. Two players are required for the game; the player with the *kaoos* tries to checkmate the tiger, while the player with the tiger attempts at capturing all the *kaooas* by jumping over them according to the ordinary rules of the tiger play. This type of tiger-play is rather interesting, and differs from the type of tiger-play prevalent in Bengal and Orissa in which the number of goats or ballets may be 24, 20, 12 or 3, while the number of tiger may be 1,2 or 4.

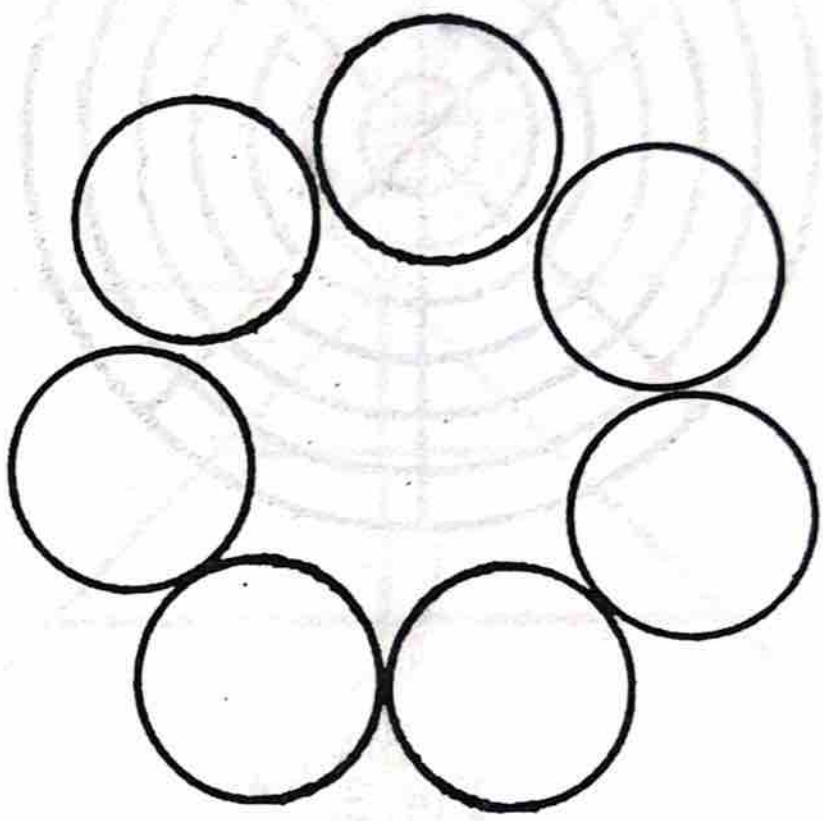

Fig. 5.

Sat-gol (fig. 5).— As the accompanying figure shows it, concentric circles with three diameters are required for playing the diagram required for this play consists of seven circles and two persons are necessary for playing it. Four pieces of stones are kept within each circle and, at the commencement of the play, one of the players takes out the 4 pieces of stones lying within one of the circles and begins dropping them successively within the different circles working anticlockwise, only one being dropped within one circle. After the last piece had been dropped within one of the circles, the pieces lying within the next circle would be taken out and dropped successively within the different circles as before. This continues until the player drops his last piece within a circle next to which there is an empty one and then he will be in possession of the pieces lying within the circle immediately next to the latter. The play will be now begun by the other person who will take out the pieces lying within the

circle next to the one from which the pieces had been removed by his adversary and proceed exactly like the previous player. Whenever a player succeeds in capturing the pieces lying within a circle immediately next to any empty one, or comes to an empty circle with one or more empty circles next to it, he shall have to stop, and the play will be commenced by his adversary with the pieces lying within the first circle next to the one, the pieces from which have all been captured by the previous player, or within the circle lying immediately after the last empty circle, the movement being in all cases against the hands of the watch. The play will go on in this way and the player who captures the larger number of pieces will be considered to be victorious.

A careful study of this game will at once show the similarity that exists between it, and the Khasia game known as *Mawkarkatya*,[3] and a few other games allied to it, and a description of which has already been published. The Jubbulpur game however, appears to be an extremely primitive form of the game prevalent in the Assam hills, Orissa and Madras Presidency.

[3] Journ. Asiatic Soc., Bengal, N.S., Vol. XIX, pp. 71-74, 1924.

NOTES ON A TYPE OF SEDENTARY GAME PREVALENT IN MANY PARTS OF INDIA

HEM CHANDRA DAS GUPTA

The type of sedentary game which is the subject matter of this note is usually played on a plank on which a number of shallow depressions have been scooped out; the depressions are filled with small pieces of stone, cowries or seeds,

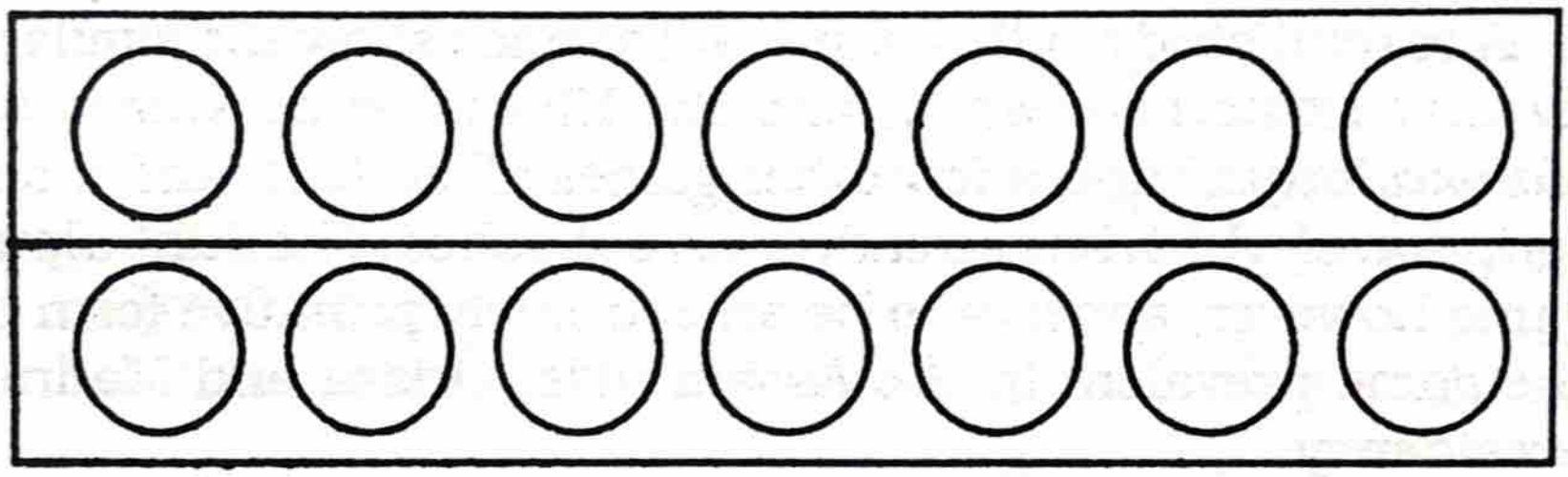

Fig. 1. Plan of the board used to play the game known as Máwkár kátiyá

etc. My attention was first drawn to this game in June, 1923 at Cherrapunji. Among the Khasis the game is known as *Máwkár kátiyá* (= going round the slab or plank). It may be mentioned that though a wooden board in which rough circular and shallow depressions have been scooped out in two rows, the number of rows in each hole being seven, is generally used, sometimes, specially on fair days, the game is played outside the house on stone slabs. Two persons are necessary for the play and, to start with, five small stones are kept within each depression. One of the players picks up the stones from a depression lying in the row just next to him and goes on putting one piece of stone into each depression. As soon as he has done with the five pieces he started with, he picks up all the stones lying immediately in front of the depression where the last piece was deposited. He must repeat this action till, after having deposited all the pieces that he may carry in his hand, he comes to an empty depression lying immediately in front of the one where the last piece was dropped. In this case all the pieces of stone lying within the

depression immediately next to the vacant one will come into his possession and the other player will begin the game, following exactly the same method, each playing from right to left along his line of depressions and from left to right along the line of depressions belonging to his adversary. The players will thus keep on the game alternately till all the pieces have been removed from the plank, with the general result that one of the players is in possession of more than 35 pieces of stone and the other less. The game will now be started for the second time but not by the player who started it on the previous occasion and one peculiarity will be observed while arranging the pieces. Suppose for example, that after the end of the first game, one player finds that he has 37 pieces in his possession then he will arrange 35 pieces in the usual way, while two (i.e. the pieces he has obtained in excess of 35) will not be placed in any of the depressions, but will remain to his credit while the game is being played for the second time. The other player will now arrange the 33 pieces. placing 3 within the depression lying to the extreme left along his line while the other six will contain 5 pieces each. On this occasion the following additional rules will also be observed :

(a) The person that has got two pieces extra will have all the single groups of 2 pieces that may accumulate within one depression while his adversary is playing to his credit. While the latter will have all the single groups of 3 pieces that may accumulate within one depression to his credit while the former may be playing.

(b) The winner will have the depression to his extreme left covered by his palm and gain one piece every time he passes round this depression, while his adversary will not be allowed to drop any piece in it.

(c) The pieces that will be gathered in the depression where the three pieces were placed will always come to the possession of the winner.

These rules will certainly vary according to the difference in the number of pieces possessed by each player after the end of any game. If we, for example, suppose that the winner has got 47 pieces after one game then two depressions beginning from the right of his adversary along the row belonging to his adversary will be kept covered over and none will be allowed to place any piece inside these. The games will be

continued in this way and the person who succeeds in capturing all the pieces of his opponent will be victorious. It is clear that the rules of the game are a little complicated and as I had to obtain my information from an old Khasia woman with the help of an interpreter I would not be surprised if it was found that the rules enumerated above required correction. I sincerely hope that, as a result of the publication of this note, some better informed person may come forward and give us (possibly) a more correct and complete account of the game.

It is interesting to note that a game like this is prevalent in many parts of India. Lt. Colonel Shakespear has described a game like this among the Lushais. The game is called "Vai lung thlan"; the board has 12 shallow depressions in two rows and is played according to rules different from those stated above.[1] A similar game played in parts of Orissa is known as *Kánji-guti*. One hundred and forty-five pieces are required to play this game. One piece is kept within one depression of the central pair, while the other depression of this pair is kept empty and 12 pieces are placed within each of the 12 remaining depressions. As I gather from my Ooriya servant, the rules of the game are mainly the same as are followed by the Khasis with some differences. In the case of the Orissa game one row of depressions does not belong to one player, but the six lying on one side of the central pair belong to one player and the other six lying on the other side of the central pair belong to the other player. During the first run of the play no piece is to be dropped in that depression in which one piece was placed at the beginning of the game. Then the rules observed by the Khasis are generally followed with the important exception that none will be able to play with the pieces lying with the central pair of depressions, i.e. they cannot be taken out of these depressions and dropped in the succeeding ones but the pieces lying within the central pair can be captured like the pieces lying in the others. In the Orissa type the pieces are moved from left to right and the player who captures more pieces at the end of each game is

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[1] The Lushai Kuki Clans, p. 39, 1912. According to this author a similar game is played in many parts of Africa and is known as 'Mancala Bao' or 'Warri'.

the winner, and the result of one game is not carried over to the next to finish what may be called a set.

A game of this type is also prevalent in the Madras Presidency. It is called *Omangunta peeta* (a plank with holes) in Telugu and *Palanguli* (a plank with holes) in Tamil and for the detailed information about the rules that are followed I am thankful to Mr. V.V. Rau of the Bengal Nagpur Railway. There are fourteen shallow depressions in two rows, seven being in each row. In the central depression of each row only one piece is placed, while inside each of the rest are placed six, twelve of twenty-four pieces. The usual rules of the game are followed and the special point to be noted is that like the Orissa game none will be able to play with the pieces lying in the central pair, and though they may be captured according to the ordinary rules of the game they will be removed only at the end of each game, and the pieces lying in a central depression are to be shared equally between the players if each of them in course of his play dropped down his last piece in a depression separated from the central one by an empty one or the pieces lying in the central depression may belong to none, and in that case they will not be removed from their position. If the number of pieces lying in a central depression is odd, one will be left in it and the rest will be equally divided between the two players, but if it is even two will be placed in the central depression and the rest will be divided equally between the two players. It should also be noted that when a player succeeds in capturing pieces lying in a depression, he will also seize all the pieces that may be in the depression opposite. At the end of one game each player will arrange the pieces he has been able to capture in the line of depressions next to him and those which may be vacant will be supposed to be non-existent in course of the succeeding game. The successful player will be he who will be able to capture all the pieces. The pieces are moved from left to right.

A FEW TYPES OF INDIAN SEDENTARY GAMES

HEM CHANDRA DAS GUPTA

This short note has been drawn up to put on record an account of three types of sedentary games, the description of which, as far as I know, has not hitherto been published. One of them is prevalent in the Central Provinces and the other two in Orissa. For the details of the Central Provinces game *(egára guṭi)* I am indebted to a gentleman of the district of Bhandara whom I met at the Linga Railway Station (Chhindwara district) a few years ago, while the details of the Orissa game were obtained from my own Oriya cook.

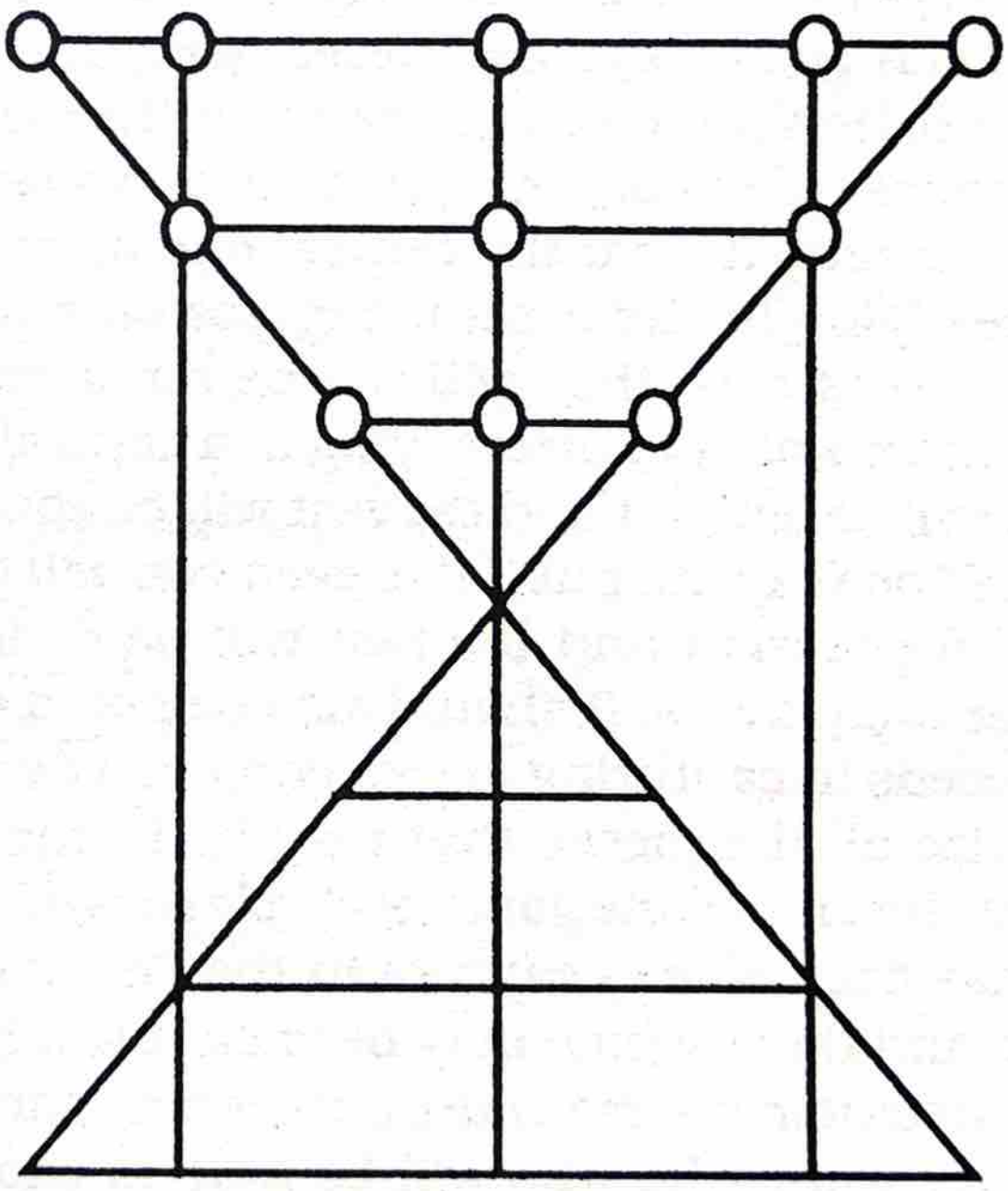

Fig. 1.

The diagram adopted for the Central Provinces game is shown above (fig. 1). Two players are necessary for the game. There are 23 cross-points and of these 22 are filled up with ballets of two different descriptions, each player having 11 while the central cross-point is kept vacant at the beginning

of the game. The play proceeds in the usual way of jumping over and capturing the ballet of the adversary lying on the next cross-point if there be an un-occupied cross-point just beyond the latter and in the same line.

The diagram used for this play is peculiar and its like has not been recorded from any other part of India. The game resembles the Punjab game of *bára guṭi* in having only the central point vacant.[1]

The Orissa games are two types of tiger-play. The diagram used in one of the games is given below (see fig. 2).

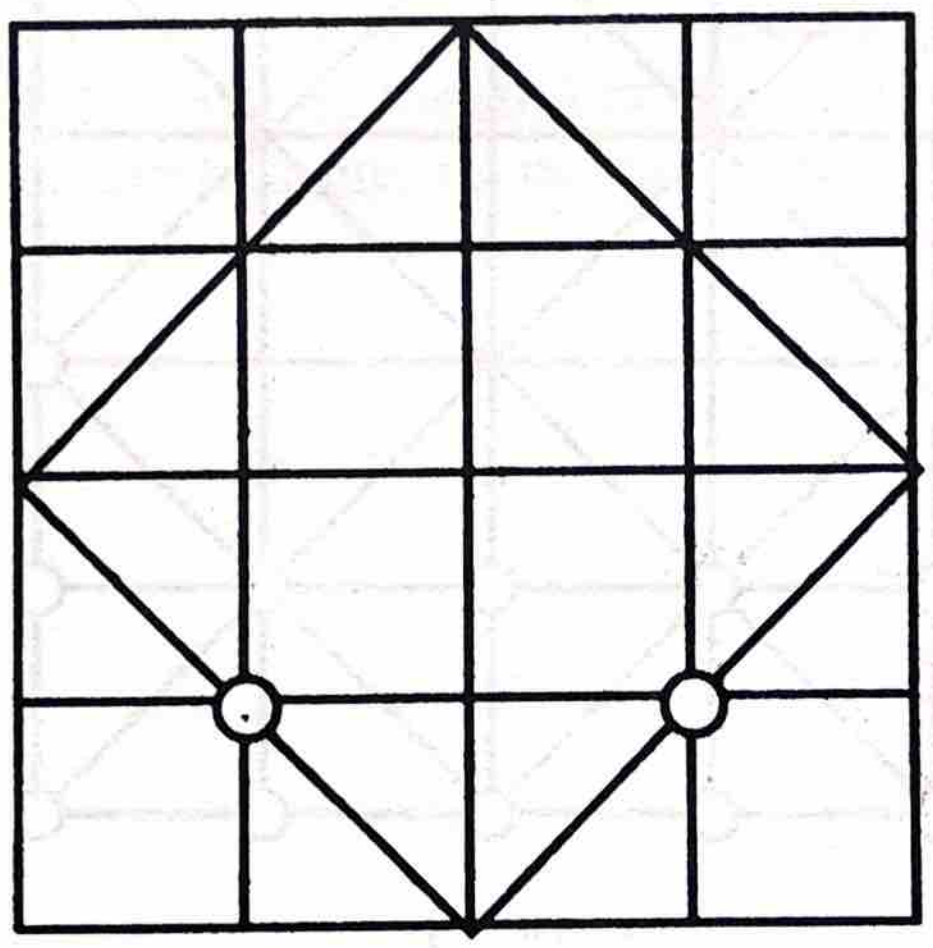

Fig. 2.

Two persons are necessary for playing this game, one in charge of the tigers and the other in charge of the goats. The tigers are 4 in number while the number of the goats is 20. Before the commencement of the game, the tigers are arranged at the places indicated in the figure by the circles and 4 goats are kept on any 4 cross-points according to the discretion of the player. The move begins with the man who has got the tigers, and the player who has the remaining 16 goats in his hand must place all of them on the cross-points one after another before he may move any goat on the diagram from one cross-point to another. The player with the tiger tries to capture as many goats as he can while the other player aims at checkmating his opponent.

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[1] Calcutta Review, pp.510-513, 1923.

In Orissa there is another simpler type of tiger-play in which the game is carried on with 1 tiger and 12 goats. In this game the tiger and all the goats are placed on the cross-points first and the play is carried on under the usual rules. The diagram of the game is given below (see fig. 3).

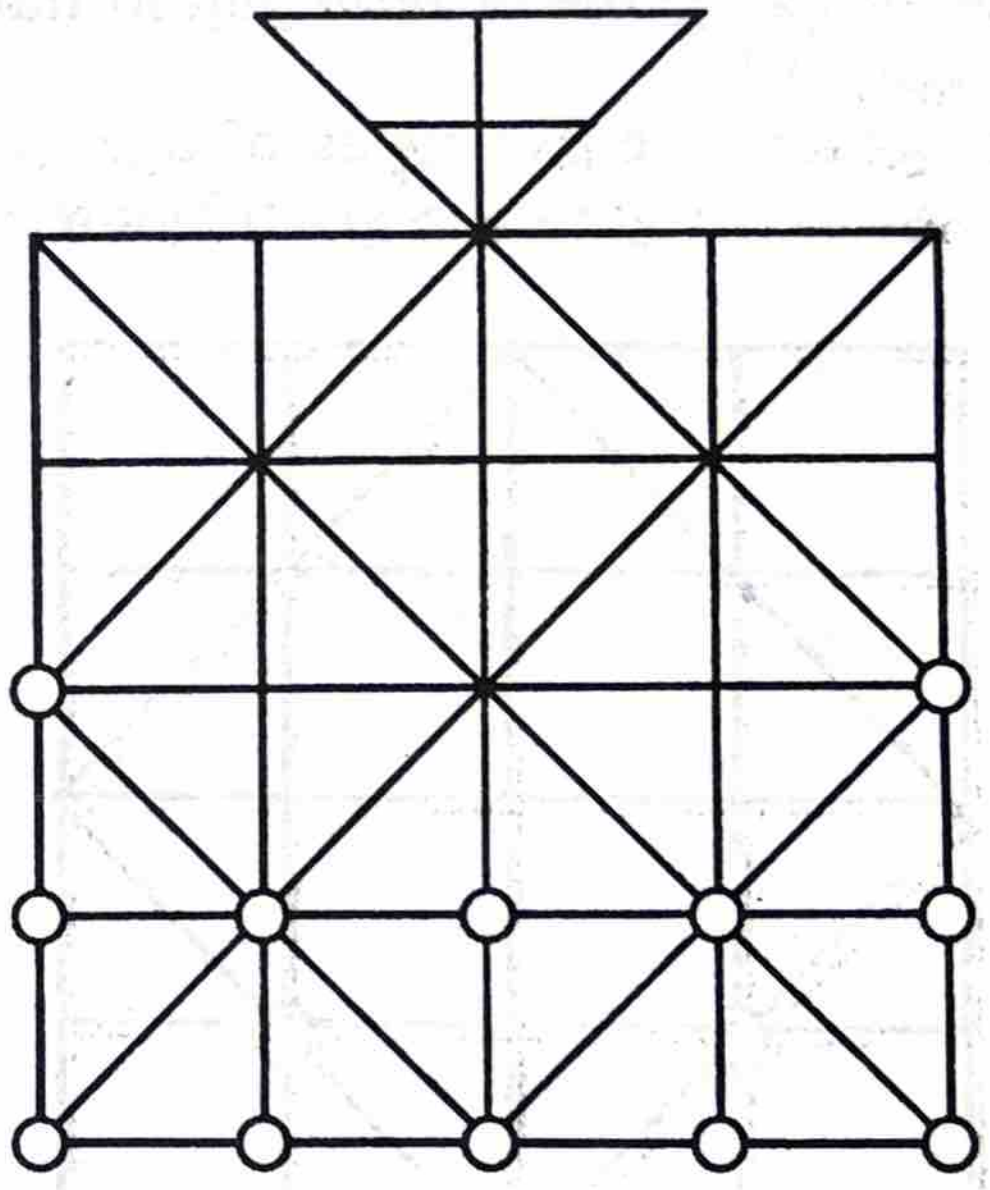

Fig. 3.

It may be noted that a game exactly like the latter type of tiger-play is prevalent in parts of Bengal while the former type of game may be compared with that known as the *Kulaochal* played by the Hos of Kolhan and described by Mr. Majumdar,[2] though there are some important points of distinction between them. In this connection attention may be drawn to the game of *Rimoe* or tiger-play prevalent at Simaloer (Sumatra) and described by Jacobson.[3] Though there are important differences between the Orissa game as described in connection with figure 2 and the Sumatra game, there is one point in which the Orissa play and the Sumatra play agree remarkably as in both cases, before the player with the

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[2] Man in India, Vol. V. pp. 196-198, 1925

[3] Tijdsch Ind. Taal, Land-en Volkenkunde, Deel LVIII, pp. 8-10, 1919.

goats is allowed to move the ballets from one cross-point to another, he has to put all his ballets on the cross-points. This similarity becomes quite clear when we bear in mind the description of the Orissa game as given above and the following remark of Mr. Jacobson on the point:

Zoolang de tegenpartij nog stukken in de hand heeft, mag zij hare stukken op het bord niet verschuiven.

Attention may be drawn in this connection to the game of wolf and sheep prevalent among the Tibetans.[4] The diagram used by the Tibetans is just like the one figured above (fig. 3) with the exception that the lines joining the middle points of the four sides of the big square are wanting in the Tibetan game in which the wolf is located at the middle of the square and not within the triangle as in the Indian game.

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[4] Rim.chen Lha-Mo (Mrs. Louis King): We Tibetans, pp. 141-143, 1926.

A FEW TYPES OF SEDENTARY GAMES PREVALENT IN THE PUNJAB

HEM CHANDRA DAS GUPTA

INTRODUCTION

The details of the games recorded in this note were obtained from the district of Mianwali which I had occasion to visit last October in connection with some geological work. The information was gathered mainly from my Pathan coolies, but the games are played by all classes of people of all ages and both sexes. The diagrams used for the games are often found inscribed on slabs of rocks, but improvised diagrams are also very often to be met with. The games to be described are known as *do-guṭi, tre-guṭi, nao-guṭi, sher-bakar, ratti-chitti-bakri* and *khutkā-boiā*. All the games are for two players.

DO-GUṬI

As is implied by the name *do-guṭi* (=two *gutis*, or pieces), each player begins the game with two *guṭis* which they have

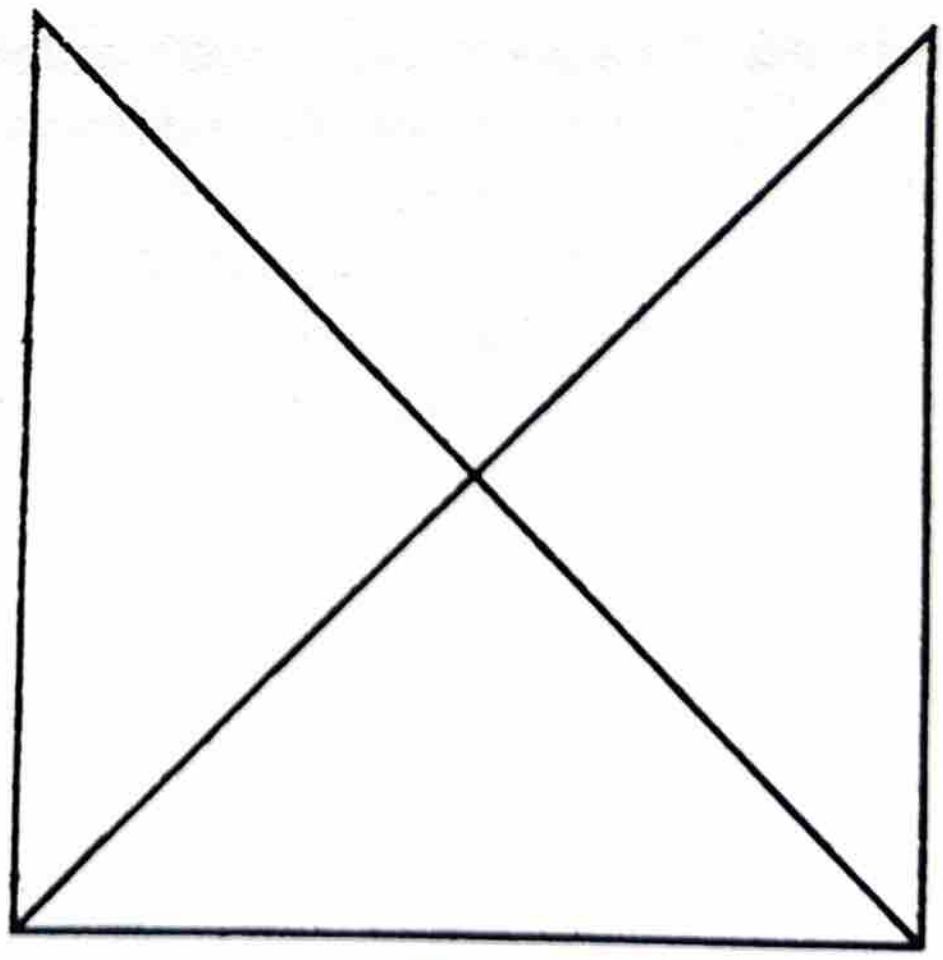

Fig. 1

to place on any of the 'cross-points' alternately. The movement

of the pieces then begins from one 'cross-point' to the next along the lines as drawn in figure 1. Each player tries to checkmate his adversary by these movements, and whoever succeeds in this attempt is the winner. In this game no piece may be captured by any player.

TRE-GUṬI

As is implied by the name, the game is carried on with three pieces for each of the two players, who have to place them on any of the cross-points alternately. The movement of the pieces begins after all the six pieces have been properly located. The pieces have to be moved along the lines as drawn in figure 2. The aim of each player is to capture the

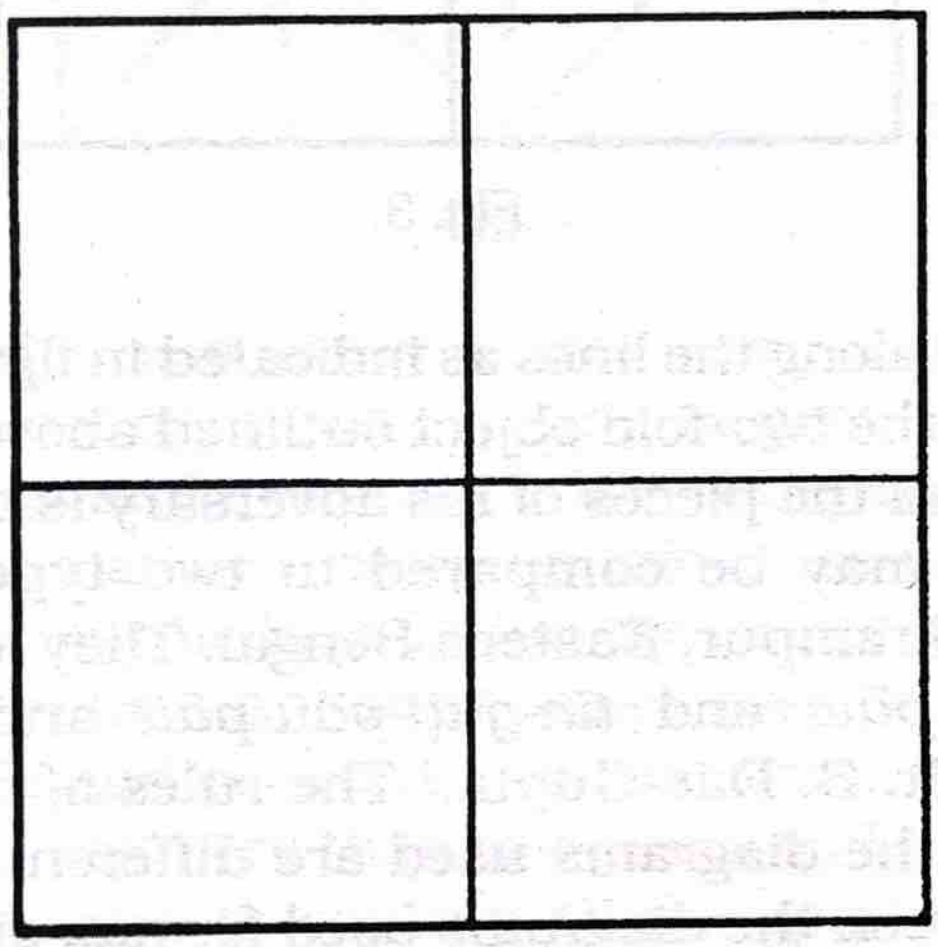

Fig. 2

pieces of his adversary by making his own piece jump over that of the other whenever there is a vacant 'cross-point' in front of the latter and in the same line. The player who succeeds in capturing all the pieces of his adversary in this way is the winner of the game.

NAO-GUṬI

In the game of *nao-guṭi* (=nine pieces), each of the two players provides himself with nine pieces and alternately puts one of his pieces on the 'cross-points', endeavouring to get three pieces along one line, while preventing his adversary from doing so. Whenever a player succeeds in getting three of his own pieces in one line he captures one of the pieces

belonging to his opponent. After all the pieces have been put on the 'cross-points', the players begin to move their pieces

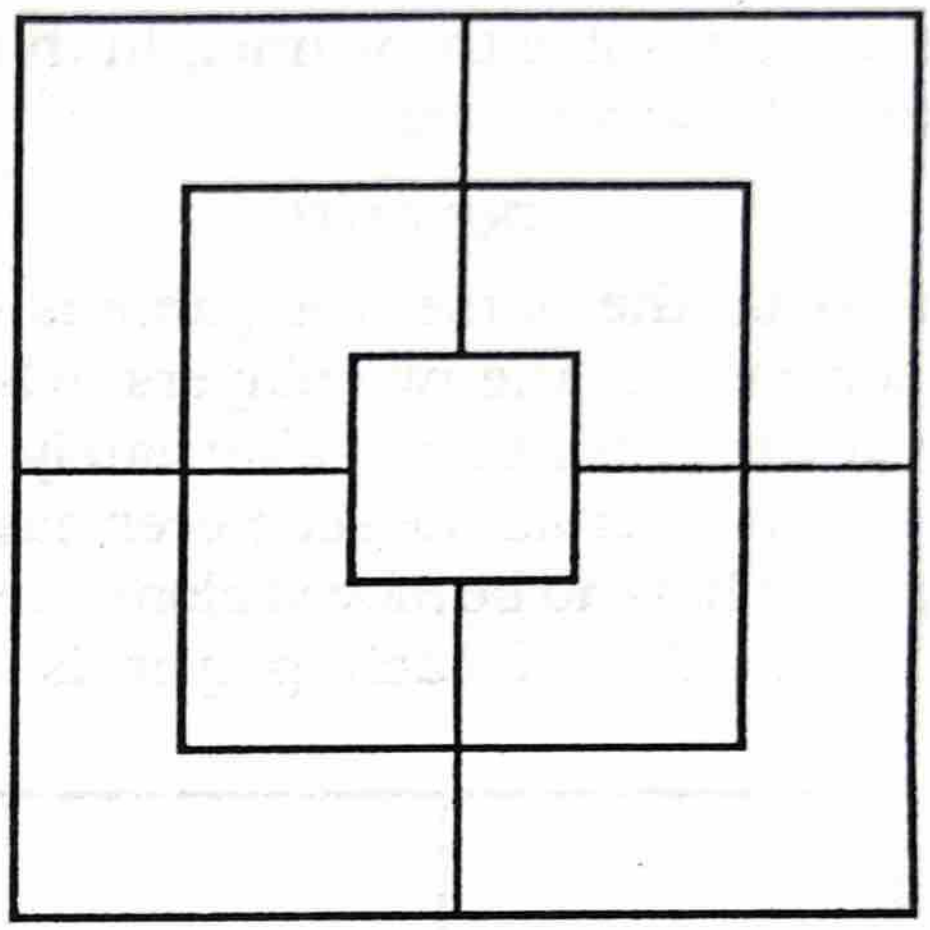

Fig. 3.

alternately and along the lines as indicated in figure 3, having always in view the two-fold object outlined above. The player who captures all the pieces of his adversary is the winner.

This game may be compared to two types of games prevalent in Vikrampur, Eastern Bengal. They are known as *bāra-guṭi pāit-pāit,* and *tin-guṭi-pāit-pāit* and have been described by Mr. B. Das-Gupta.[1] The rules of the game are the same, but the diagrams used are different, though the difference between the diagrams used for *nao-guṭi* and *bāra-guṭi-pāit-pāit* is very slight, that for the latter being only a little more elaborate and consistent with the increase in the number of pieces required for the game.

SHER-BAKAR

The game of *sher-bakar* (=tiger and goats) is a tiger-play. Of the two persons necessary for this game, one is in possession of two pieces representing the tigers and the other of nineteen pieces representing the goats. The latter pieces are placed within the circles marked in figure 4, 15 being equally divided among 3 circles while four are located in the fourth. The two tigers are located at the 'cross-points' marked T.

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[1] Quart, Journal Vangiya Sahitya Parishad, Vol. XIV, pp. 241-243, 1314 B.S.

As in all types of tiger-play, the goats and the tigers may usually be moved from one cross-point to that lying next to

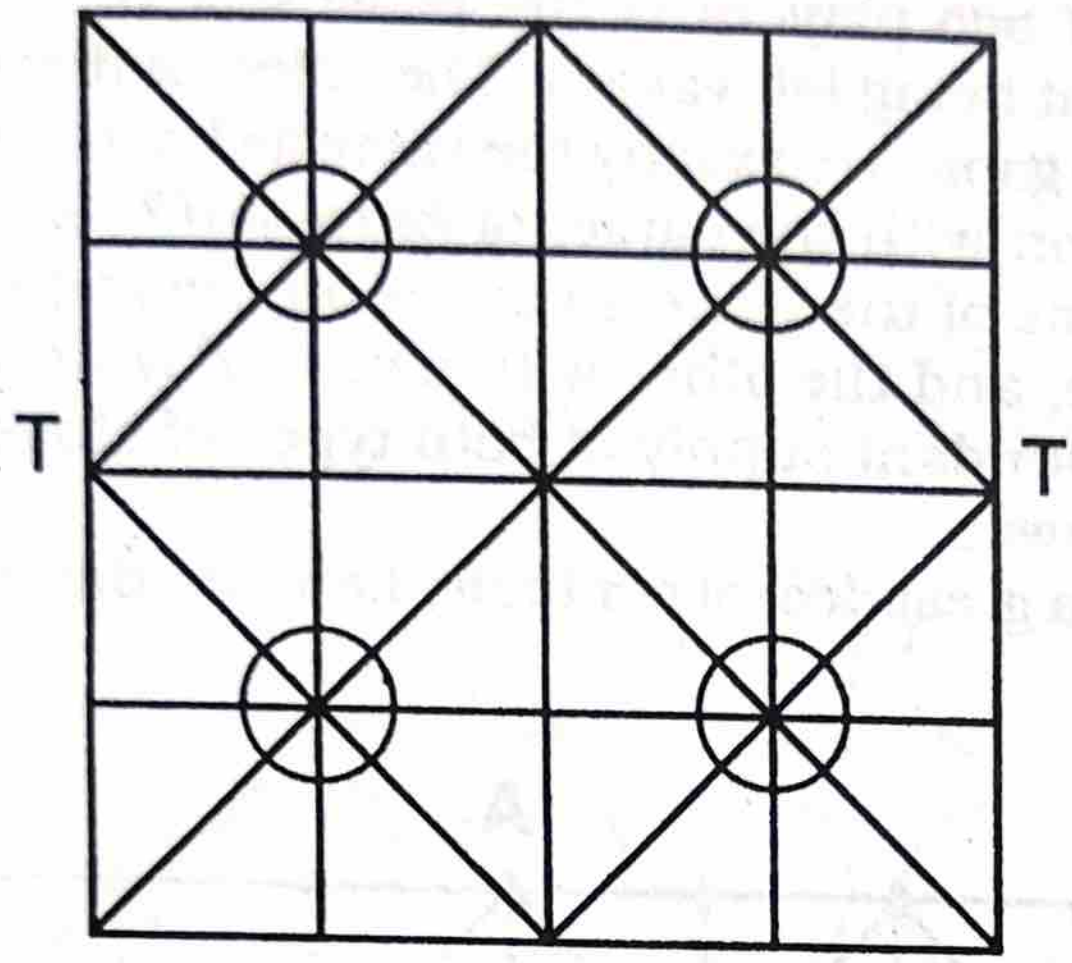

Fig. 4.

it, except in the case where a tiger may jump over a cross-point with a goat on it and capture the goat, the cross-point next to the goat and in the same line being vacant. Not more than one goat may be located on one cross-point, but more than one goat may be kept within the circles indicated in the diagram. When the tiger-piece jumps over two or more goats within a circle and occupies the next vacant cross-point in the same line, not more than one goat may be captured. One of the players tries to capture all the goat-pieces, and the other to checkmate the tiger-pieces one of which has to be checkmated immediately after the checkmating of the other.

There is a good deal of similarity between this game and a type of tiger-game prevalent in Eastern Bengal.[2] Reference may also be made in this connection to a type of tiger-play prevalent in parts of Orissa,[3] and Kolhan,[4] and to the game of Rimoe found in parts of Sumatra.[5]

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2 Quart, Journal Vangiya Sahitya Parishad, Vol. XIV, pp. 240-241, 1314 B.S.

3 For a summary of this paper see Proceedings of the Tenth Indian Science Congress, p. 233.

4 Man in India, Vol. V, pp. 196-197, 1925.

5 Tijdschr, Ind. Taal-Land-en Volkenkunde, Deel LVIII, pp. 8-10, 1919.

RATTI-CHITTI-BAKRI (RED-WHITE-GOATS)

As is shown in figure 5. there are 81 cross-points, and each of the two players is the possessor of 40 pieces, the central point being left vacant. The rules that are followed in playing this game are exactly the same as have been described in connection with the game, of *bāra-guṭi*.[6] As is implied by the name one of the players carries on the game with pieces of red stone, and the other with pieces of white stone, there being an abundant supply of both types of stone in the area round Mianwali.

There is a great deal of similarity between this game and the

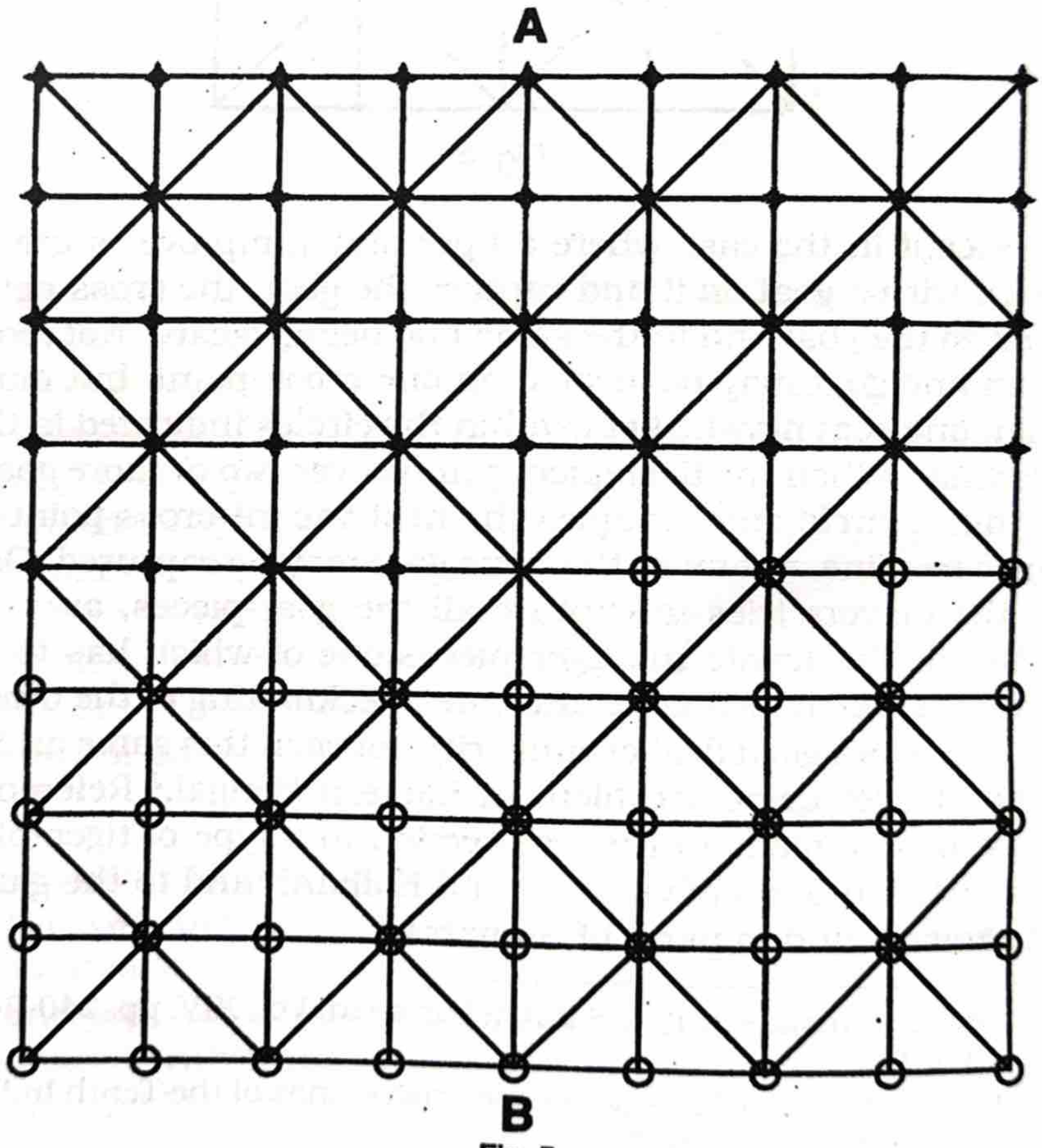

Fig. 5.

[6] Cal. Rev., New Serious, Vol. 6, No. 3, pp. 510-513, 1923.

game known as Satul prevalent in Sumatra,[7] the only distinction being that in the Sumatra game, two additional triangles with their apices at A and B are required. Each of these two triangles has six cross-points, so each player has to provide himself with 16 pieces instead of 40 as in case of the Punjab game.

KHUTKĪ-BOIĀ (DUG CIRCLES)

Two persons are necessary for playing this game, and, as shown in figure 6, two rows of five circles are required, each

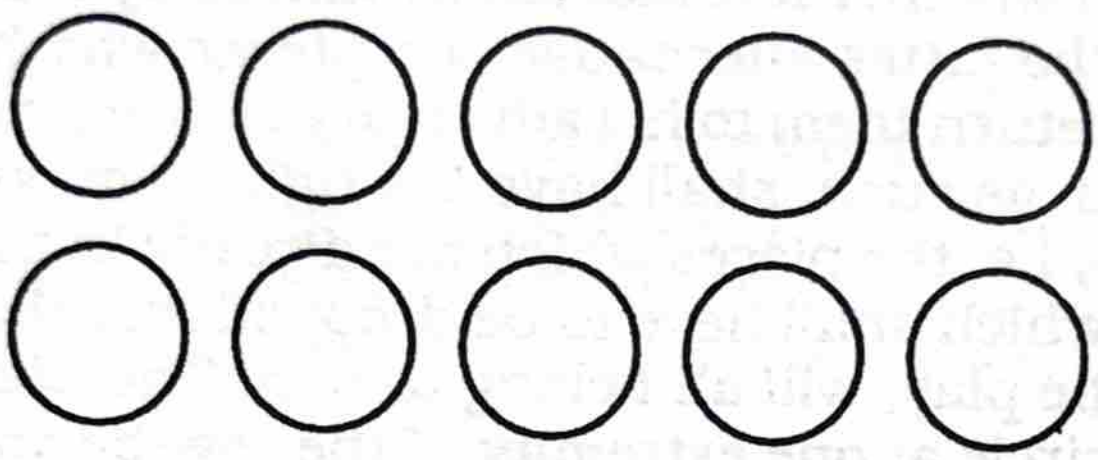

Fig. 6.

row belonging to one player. As is implied in the appellation *Khutkā*, i.e. dug or inscribed, the circles are usually scooped out in a slab of stone. At the beginning of the game five pieces are placed in each hole so that each player requires 25 pieces. The rules that are followed are generally like those already described in connection with *Mawkar-katya* and a few other similar games,[8] the pieces being moved from left to right. Among the deviations from the rules previously described may be pointed out one, according to which each group of four pieces which may be found within any hole in the row belonging to a player falls to the share of that player.

At the end of each game the players may have the same number of pieces or one of them may have pieces in excess of those obtained by the other. The difference between the number of pieces belonging to the two players may be less than five, or more than five. If it is more than five, then all multiples of five belong to the winner and the corresponding number of circles belonging to the other player will be supposed to be non-existent and no pieces are to be thrown in them.

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[7] Tijdschr. Ind. Taal-Landen Volkenkunde, Deel LVII, pp. 10-11, 1917.

[8] Journ. Asiat. Soc. Bengal, N.S., Vol. XIX, No. 3. pp. 71-74, 1923.

When the difference is less than five, or when the number of pieces belonging to the winner is in excess of a multiple of five the sum of the excess pieces which are with the two players will be five, and these excess pieces may be distributed either in such a way that one player will have four pieces and the other only one or one player will have three pieces and the other only two. In case of the former alternative, the player with four pieces of stone will be styled the *Bhādār,* while the other one will be called the *Kungidār,*[9] and in course of the play the *Kungidār* will receive one piece at the commencement of each deal whether it is started by him or by his adversary; in case of the latter alternative the player who has got two pieces will return them to his adversary who will be styled the *Bhādār* and, as such, shall have the right to make one of his circles *bhā-*, i.e. the pieces which are already in that circle as also those which shall have to be dropped into that circle, in course of the play, will all belong to him. The *bhā,* however, must be a circle at one extremity of the row-belonging to the *Bhādār,* i.e., the player who has three pieces in excess of a multiple of five. At the end of the play the *Bhādār* shall have to return to his adversary the two pieces obtained from him at the beginning of the play. The player who has the greater number of pieces with him without any restriction as to the time or the number of games is considered the winner.

CONCLUSION

Six different types of sedentary games have been described and, as far as it is known at present, nothing similar to the first two has been recorded from other parts of India. Of the remaining four, one is parallelled by a similar game prevalent in parts of Bengal, while another is a type of tiger-play similar to some games played in Bengal and Orissa. Of the two remaining games, that of *Khutkā boiā* is similar to certain games prevalent in parts of Assam, Orissa and the Madras Presidency, while a very primitive example of this type of game, known as *satgol,* is found in the Central Provinces.[10] The resemblance between the Sumatra game of *Satul* and the Punjab game of *Ratti-chitti-bakri* is very striking and strongly supports the possibility, as already suggested,[11] that it is of Indian rather than of Malayan origin as held by Jacobson.[12]

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[9] The meaning of the word has not been determined.

[10] Journ. Asiat. Soc. Bengal, N.S., Vol. XX, No. 5. pp. 165-169, 1925.

[11] Cal. Rev., Volume 6, No. 3, pp. 512-513, 1923.

[12] Tijdschr. Ind. Taal-Land-en Volkenkunde, Deel LVIII, p. 10, 1919.

TWO TYPES OF SEDENTARY GAMES PREVALENT IN BRITISH GARHWAL

HEM CHANDRA DAS GUPTA

INTRODUCTION

The details of the two types of sedentary games that are recorded here were obtained by me from a few local coolies belonging to British Garhwal during my stay in that district in last October in connection with some geological work. The games are known as *bāgh-batti* and *bheri-bakri*.

BĀGH-BATTI

The game of *bāgh-batti* (bāgh=tiger and batti=guti=piece) is

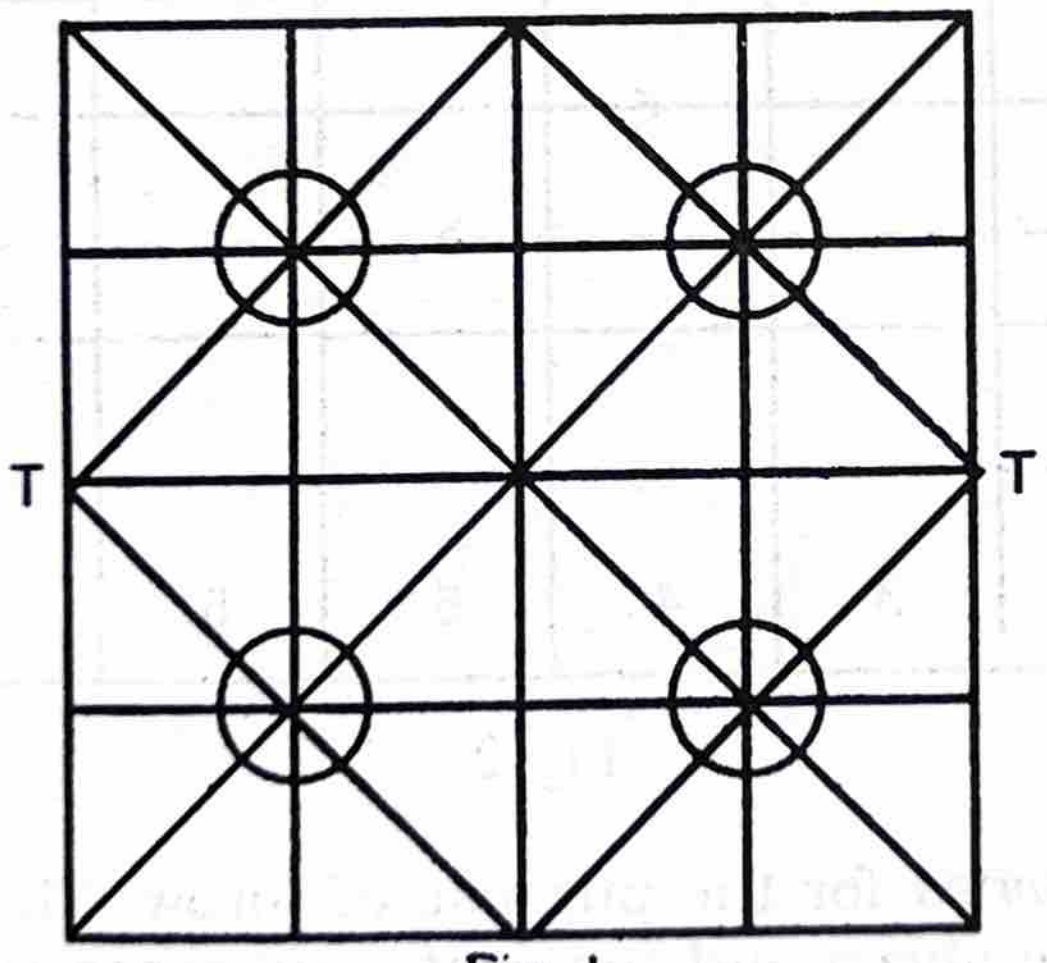

Fig. 1.

a type of tiger-play and two persons, one of whom is the possessor of two pieces representing two tigers and the other of twenty pieces or *battis*, are necessary for playing it. The twenty pieces are to be placed within the four circles and the two *bāghs* at the points T as shown in the diagram (Fig 1). The rules of the game are very similar to those already described by me in connection with the game known as *sher-bakar*[1] with this

[1]. Journ. Asiat. Soc. Bengal, N.S., Vol. XXII, pp. 143-148, 1926.

difference that, in the game of *sher-bakar,* the number of pieces is not twenty but nineteen of which fifteen are equally distributed among 3 circles and only four are placed in the fourth. In all other respects the rules of the two games are the same. Thus, if the tiger jumps over a circle with more *battis* than one and occupies the immediately next vacant cross-point in the same line, only one *batti* may be captured and for the possessor of the *battis* to win the game he has to checkmate the two tigers one immediately after the other.

BHERI-BAKRI

The game of *bheri-bakri* (sheep and goat) is played by two persons with 16 pieces equally divided between them and 4

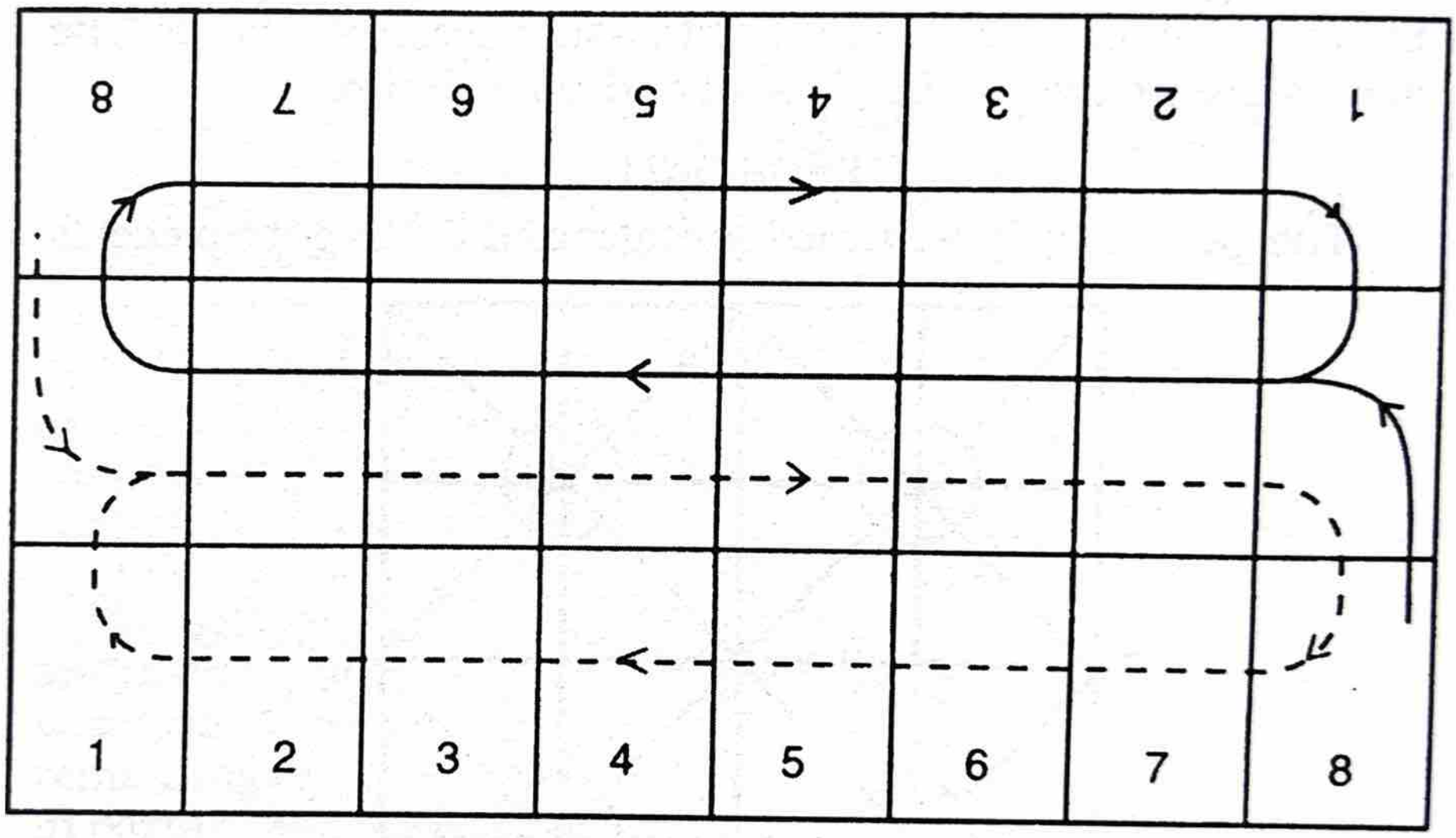

Fig. 2

pieces of *cowries* for the purpose of throw. The 16 pieces represent the sheep and the goats and those representing the goats are usually of a white colour and those representing the sheep are usually of a black colour. By means of the vertical and the horizontal lines the rectangular-diagram used for the play is divided into 24 compartments and of them 8 belong to each player as shown above (Fig. 2). The pieces are arranged in the order as indicated in the diagram and their movement is regulated by the result of the throw of the *cowries,* the result being described as *poā, do, tin* or *cār*—*i.e.,* the number of points gained—according as the number

of *cowries* which show their mouths up after each throw is one, two, three, or four. When no *cowrie* shows its mouth up after a throw, the player gets no point to his credit. After the players have arranged their pieces in the way as indicated above, in the diagram, they begin to throw the *cowries* and when a player gets a *poā* to his credit, he is able to move the piece lying in the compartment marked 8 to the next one lying in the middle row which may be distinguished as the neutral row. After a piece has been moved from its original compartment to that in the neutral row, a player (say A) can move it from one compartment to another, the number of movements being regulated by the number of points gained, *i.e.*, if he has 3 points in his favour, his piece will occupy the third compartment unless it is already occupied by a piece of his adversary B in which case the latter piece will be captured by A whose piece will now occupy the compartment thus made vacant. Whoever of the two players succeeds in capturing all the pieces belonging to his adversary is the winner. The rules that have to be observed while playing this game are the following :

1. A player who has a *poā* to his credit is entitled to have a second throw of the *cowries*.
2. When there is no point to the credit of a player, *i.e.*, when the mouth of no *cowrie* is seen after a throw, the next throw passes on to his adversary.
3. One player can play only with one piece at a time *i.e.*, the piece occupying the compartment No. 8 has to be brought out first and must be captured by the other player before the former player can bring out the piece occupying the 7th compartment of his own row.
4. For all points of one, *i.e.*, *poā*, the requirements of the pieces lying within the player's own row of compartments must be satisfied first and before all the pieces have been shifted from one compartment to another, the piece which is out of the player's row of compartments may not be moved for a throw that gives to the player credit for one point only, *i.e.*, *poā*.
5. No piece may be moved from its original compartment unless the player to whom the compartment belongs has got a *poā* to his credit. Thus if the piece No. 8 belonging to a player be captured and if the piece No. 7 has not

been previously shifted by him owing to his not having secured already a *poā* necessary for the purpose, it (the piece No. 7) shall be moved only when he succeeds in getting a *poā* to his credit and the other throws in the interval, carrying other values, are of no avail to him.

6. A player's piece, when out of his own row of compartments, has to be moved from right to left in the neutral row and from left to right in that of his adversary. It can never be made to enter the player's own row but must be moved only in the other two rows spirally in the directions as mentioned above and also indicated in the diagram.
7. The pieces of the player are to be moved gradually from a lower number to a higher one and to the neutral zone only from the compartment marked 8.

ON A TYPE OF SEDENTARY GAME PREVALENT IN SHAHPUR, THE PUNJAB

HEM CHANDRA DAS GUPTA

The game that is described in this note is a type of tiger-play prevalent in the district of Shahpur in the Punjab. It is known locally as the game of *sher-bakr*, *i.e.*, tiger-goat. The details of the game were obtained from the sub-assistant surgeon in charge of the charitable dispensary of Pail (Shahpur) in the Salt range, a locality I had an occasion to visit during the Puja vacation of 1929 in connection with some geological work. The diagram that is used for playing this game is given below (Fig. 1) :

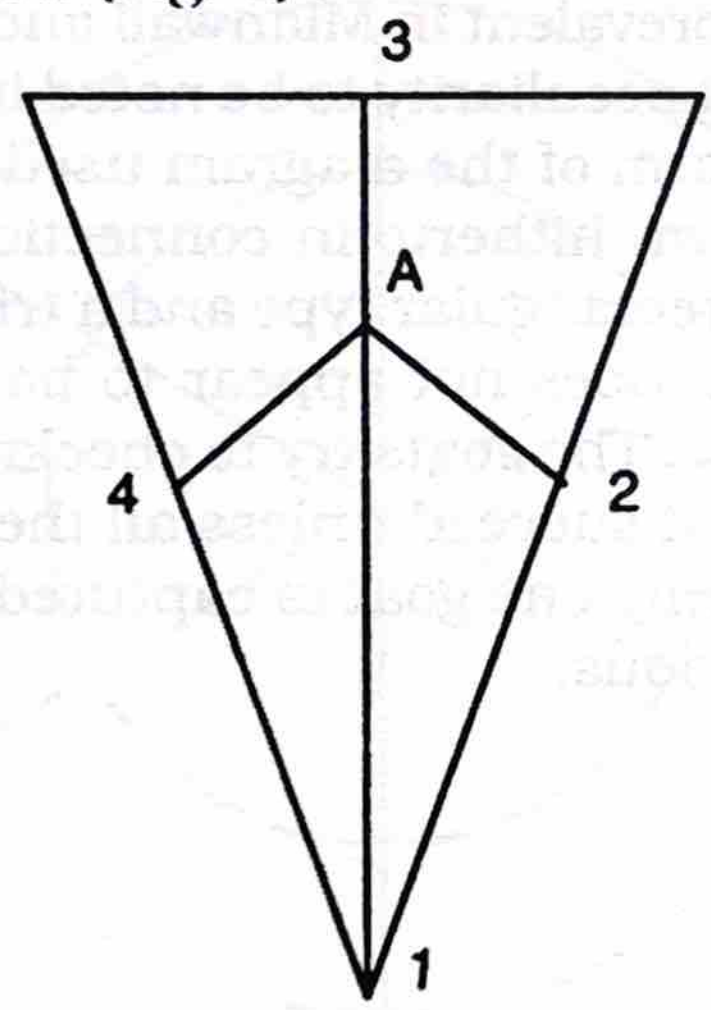

Fig. 1

Two persons are necessary for playing this game, one being in charge of one piece, the tiger, and the other in charge of four pieces, the goats. At the commencement of the game the four goat pieces are to be kept at A and the tiger piece at the apex of the triangle, *i.e.*, at the point marked 1. The possessor of the goat pieces has to move one of his pieces first and then the usual rule is followed according to which a goat piece and the tiger piece can be moved only from one cross-point to another. But there are two rules of this game which

are worthy of special notice. In all types of tiger-play which have hitherto been recorded, *e.g.*, from Orissa,[1] Tibet,[2] Sumatra,[3] Kolhan,[4] Eastern Bengal,[5] Mianwali,[6] and British Garhwal,[7] the tiger piece may jump over a cross-point occupied by a goat piece provided the cross-point next to it and in the same straight line is vacant and capture the goat piece. According to the rules of the game as prevalent in Shahpur, the tiger piece may capture the goat piece in this way, while it may also, for the purpose of capturing a goat piece, jump round the angle A either from 2 to 4 or from 4 to 2. This is a type of movement which has not been hitherto recorded from anywhere as far as my information goes. It may also be pointed out that there cannot be more than one goat piece on one cross-point though at the angle A there may be more goat pieces than one. If, however, the tiger piece succeeds in jumping over A and if at that time there are goat pieces more than one only one piece may be captured, recalling in this matter the rules of game prevalent in Mianwali and British Garhwal. Another important peculiarity to be noted in connection with this game is the form of the diagram used for playing it. All the diagrams known hitherto in connection with tiger-play are of a square or rectangular type and a triangular diagram, as depicted above, does not appear to have been recorded from anywhere else. The goats try to checkmate the tiger and this attempt cannot succeed unless all the four goats are in activity; hence if only one goat is captured the owner of the tiger piece is victorious.

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1 *Journ. Asiat. Soc. Bengal*, N.S., XXII, 212-213, 1926.
2 Riu-chen-dha-Mo (Mrs. Louis King) : *We Tibetans*, 141-143, 1926.
3 *Tidjschr. Ind. Taal-. Land-en Volkenkunde*, Deel LVIII, 8-10, 1919.
4 *Man in India*, Vol. V, 196-198, 1925.
5 *Quart. Journ. Bangiya Sahitya Parishad*, XIV, 240-241, 1314 B.S.
6 *Journ. Asiat. Soc. Bengal*, N.S., XXII, 145-146, 1926.
7 *Ibid.*, N.S., XXIII,297-298, 1927.

ON A TYPE OF SEDENTARY GAME KNOWN AS *PRETOA*

HEM CHANDRA DAS GUPTA

The type of sedentary game that is being described in this short communication was first seen being played at Sealdah by some railway coolies belonging to the district of Chapra. The diagram used for the game consists of three concentric circles divided into six parts by three diameters, as is shown in the figure 1 given below. Two persons are neces-

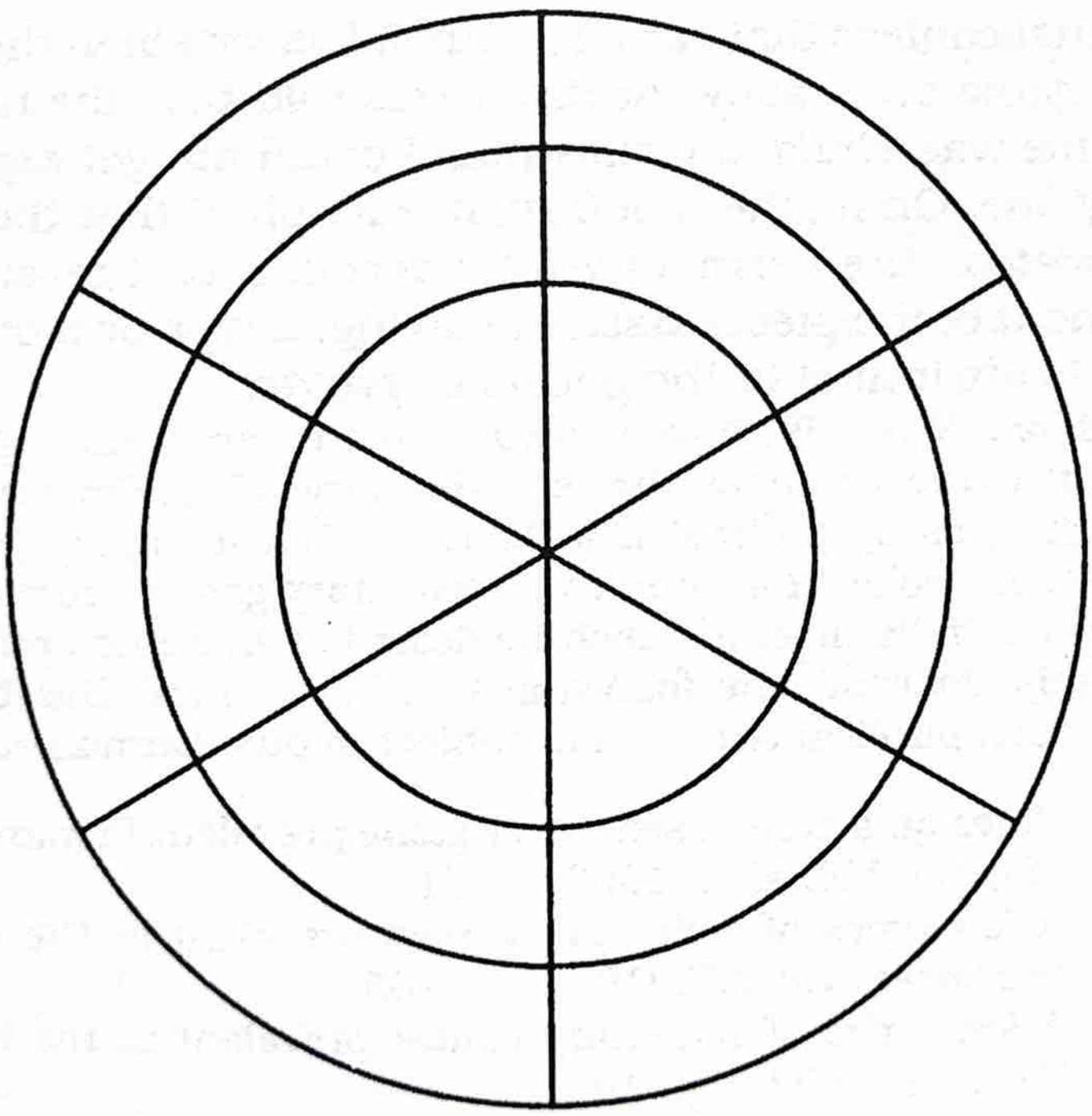

Fig. 1

sary for playing this game, nine cross-points on three contiguous radii belonging to each of them. Pieces of some hard and distinctive object are placed on each of those points and the game is started. In the first move a piece is shifted to the centre and then the usual rule of capture by jumping over the piece of the adversary, if the cross-point immediately next

to it is vacant, is followed, quite irrespective of whether the pieces are on the diameter or on the circumference, for the pieces may be moved not only on the radii or the diameters but also along the arcs or the circumference.

The game is apparently a Bihar game and may be compared with a game known as *gol-ekuish* that is prevalent in the Central Provinces and has been previously described by me,[1] the only difference being in the number of the concentric circle of which there are seven in the case of the Central Provinces game. A comparison of the two games also indicates that the Central Provinces game may have been derived from the Bihar game by increasing the length of the diameters and adding a few more concentric circles, the derivation being apparently through some intermediate stage which have not as yet been found.

I must confess that I am not sure if I ascertained the name of the game accurately. At first I was told that the name of the game was *shuia*, a term which I could not get explained by any one. On further enquiry, it transpired that the name was *pretoa*, the term having reference to the circular movement of the pieces used in playing, a type or movement which is attributed to the ghosts or *pretas*.

[*Editor's Note.*—We have to record, to our very great regret, the death of the Author on the 1st of January, 1933. Professor Das-Gupta was by profession a Geologist, but for many years he had been collecting samples of 'sedentary games' from various parts of India most of which he described in papers published in this *Journal*. The following is a list of Prof. Das-Gupta's previous publications on this subject in our *Journal*.—J.V.M.]

(1) Notes on a type of sedentary game prevalent in many parts of India. Vol. XIX, (1923), p. 71.
(2) A few types of sedentary games prevalent in the Central Provinces. Vol. XX, (1924), p. 165.
(3) A few types of sedentary games prevalent in the Punjab. Vol. XXII, (1926), p. 143.
(4) A few types of Indian sedentary games, Vol. XXII, (1926), p. 211.
(5) Two types of sedentary games prevalent in British Garhwal. Vol. XXIII, (1927), p. 297.
(6) On a type of sedentary game prevalent in Shahpur, the Punjab. Vol. XXVI, (1930), p. 411.

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[1] *Journ. Asiat. Soc. Bengal*, N.S., Vol. XX, p. 167, 1925.

A NOTE ON THE SEDENTARY GAME KNOWN AS *PRETOA**

SUNDER LAL HORA

In the preceding article the late Professor H.C. Das-Gupta has given an account of a sedentary game under the name *Pretoa*, but in concluding the note he has expressed doubts as to the accuracy of the name used. While correcting the proofs of Prof. Das-Gupta's article, it seemed to me desirable to collect further information about the game so as to complete the account. Quite a number of the durwans, chaprasis, and farashes employed in the Indian Museum come from Chapra and the adjoining districts of Bihar, so I sent for some of them and made enquiries about the game. One of the farashes was even sent to Sealdah to collect further information from the railway coolies whom Prof. Das-Gupta had seen playing the game. The result of all this investigation lasting over a week is given below.

The game is known under several names in Bihar, and in each name reference is made to some feature of the game. In the district of Ballia, which is to the west of Chapra, it is usually called *Pretoa*, but is also known as *Supa-beni*. In both the names reference is made to the movement of the pieces which may be moved along the diameters as well as along the arcs of the three concentric circles. Prof. Das-Gupta has already explained the etimology of *Pretoa* (from *Pretas* or ghosts); while *Supa-beni* is the vernacular name of swallow, a bird which in its flights circles round and round as well as darts straight forwards. In the district of Arrah the game is known as *Chakwa-boh* and *Nao-gutiya*. *Chakwa-boh* is the vernacular name used for a kind of diving bird, probably the Indian little Grebe—*Podiceps ruficollis capensis* (Salvaclori), which, when alarmed, dives under water and re-appears at unexpected points, so that there is no limit to the direction of its movements. In this name, therefore, reference is made to

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the type of movement of the pieces in this game. *Nao-gutiya* means a game which is played with nine pieces belonging to each person. This is a general designation which applies to several types of sedentary games played with nine pieces.

It may be remarked that most of the indigenous sedentary games are gradually being replaced by games of cards, etc. In making enquiries about *Pretoa* I have formed an impression that the younger generation has very vague ideas about these games. For example, I was told that this game is called *Bagha-guti*, which in reality is quite distinct, though that is also played with nine pieces. I was also informed that sometimes this game is played with 12 pieces *(Bara-gutiya)* and in that case there are four instead of three concentric circles. This will lend further support to Prof. Das-Gupta's view that *Gol-ekuish*[1] of the Central Provinces is only a variation of *Pretoa*. There would seem to be no difference in the nature of play, whatever the number of concentric circles; more circles will naturally mean more pieces to play with, and consequently more time needed to finish the game. Probably the nature of the intermediate types depends upon the amount of leisure hours to be spent.

I have incidentally collected two superstitious beliefs associated with this game. If young boys indulge too much in playing this game, the elderly people warn them that there will be a heavy downpour and consequently a deluge. The second belief is that if this game is played too much, then the cereals will become dear and consequently there will be famine. I have no doubt that both of these beliefs are meant to dissuade young boys from spending too much time on these games instead of attending to their regular work of cultivation. I am further informed that this particular game (as is also the case with other types of sedentary games) is usually played during the rainy season when the agriculturists have more leisure from the care of their crops.

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[1] *Journ. Asiat. Soc. Bengal*, N.S., Vol. XX, p. 167, 1925.

SEDENTARY GAMES OF INDIA*

SUNDER LAL HORA

In a series of articles that I propose to contribute to this Journal from time to time, I shall be describing the various types of sedentary games that are still prevalent in different parts of India. It seems to me that, in the first instance, the importance of the comparative study of such games, from the ethnological standpoint, does not lie so much in the details of their similarities and differences as in the light it throws on social contact between different groups of people. Cultural traits may migrate in various ways, and these migrations may be due either to actual movements of people or, as so often happens, to contact. The tracing of the possible routes of migrations of these games, as in all other single traits, furnishes important clues regarding the general contact–metamorphism of different people or the displacement of one by the other. Whichever may be the basic reason in a particular locality or among particular tribes, it provides important clues and evidence which are of considerable value to the historical study of their culture.

Before discussing the wider question of the cultural significance of the various games now being played in India, it seems desirable to record all the different types that are prevalent at the present time and to study the variations undergone by them during their distribution from place to place in this country. In recent years, the late Professor H.C. Das-Gupta directed our attention to the wealth of information that is still available on this subject in India in a number of articles, seven of which he published in our Journal. The present generation of educated people is almost ignorant of these local games, while the illiterate masses are also taking more and more interest in imported games for their amusement. The old games are thus dying out, and it is important to record the things which another generation may

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rarely, if ever, see. My present residence in the cosmopolitan town of Calcutta enables me to study the games played by people of the different provinces, and, moreover, the exigencies of my service in the Zoological Survey of India permit me to visit widely separated, and sometimes almost inaccessible, localities. Further, I am indebted to correspondents all over India who very kindly supply me information about these games.

To understand the rules of the games, some of which are fairly complicated, I have played them with the informants. In some cases the results have been verified by playing the same games with other people from the same locality or by sending out full descriptions to friends to check the statements.

In the study of these games I have received great help from my friend and colleague Dr. B.S. Guha, and I take this opportunity to express to him my sincerest thanks.

I. SEDENTARY GAMES PLAYED IN THE TEESTA VALLEY BELOW DARJEELING

While on a zoological tour to the Teesta Valley in April, 1933, attempt was made to collect a few types of sedentary games played in the valley. During my stay for a couple of days at Kalijhora, an old man was engaged as a cooly to help me in the collection of zoological material. This man, though of Nepalese origin, had been born and brought up in the Teesta Valley. The following three games were explained to me by this old man, and in this he was assisted by the watchman of the P.W.D. Rest House. On my return to Calcutta an account of these games was prepared and sent to my friend Mr. F.D. Raj at Kalimpong, who, after making enquiries among the coolies, informed me that the account given was correct. I am grateful to Mr. Raj for the help thus rendered.

LAM TURKI

Description—The game is played by one person, so it is a kind of a 'Solitaire', but usually a group of people sit together and play the game in turn. It is played on a board of ten crosspoints (*a-j*) arranged as in the accompanying diagram (Fig. 1). There are nine pieces of any hard substance with which the game is played. The actual play consists of two phases. In the first phase, the person playing has to get all

his nine pieces on the board, and then in the second phase, by the usual method of jumping over, has to capture all except one. The pieces can be placed on the board in any way, except that when a piece is placed on a crosspoint it has not to be shifted from its place. When removing the pieces from the board, they are taken as in draughts by leaping over the piece to be captured to a vacant space in the same straight line.

It is rather a difficult game, so the old man gave me the following directions for playing it correctly. While placing the pieces on the board, start should be made from any corner point and a piece deposited on the second crosspoint away

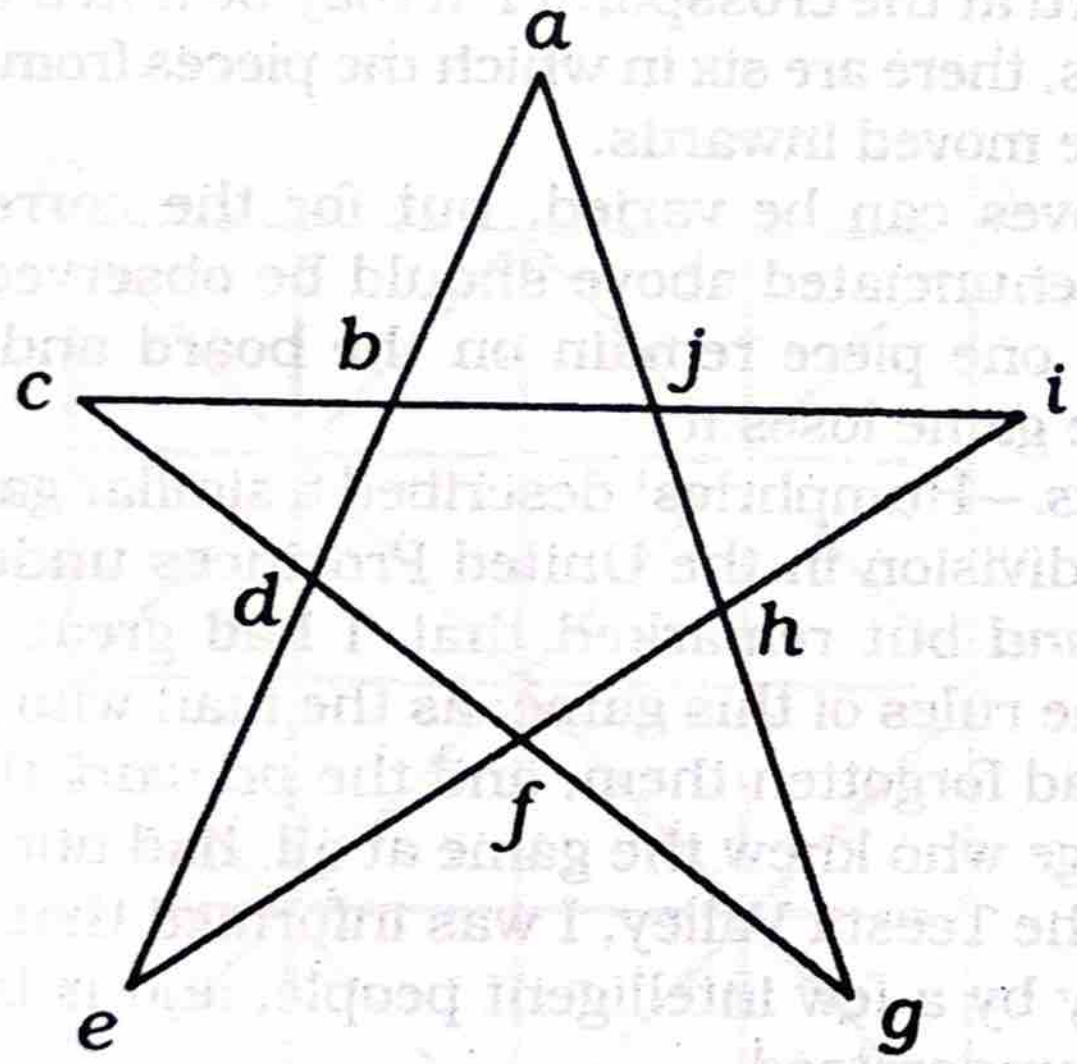

Fig. 1 : The board used in playing the game *Lam Turki*

from it in a straight line. For instance, if the start is made from *e*, then the first piece should be placed at *b*. In the next move, start is made from such a point that after counting three points, as indicated above, the piece is placed at *e*, the starting point for the first move. In every move the point

from where the start is made for the preceding move is filled up. In nine moves all the pieces are thus placed on the board. These moves may be as follows :

e d b, h f e, a j h, d b a, g f d, j h g. c b j. f d e. i h f

In each move the crosspoint represented by an underlined letter is occupied, and it may be noticed that each such point formed the starting point of the previous move. After the nine moves indicated above, one crosspoint *i* remains vacant. In removing the pieces from the board, effort should be made to avoid going to the extreme corners. For removing the pieces, the following moves may be made :

f h i, c d f, a b d, i j b, e f h, g h j, j b c, c d f

In the above-noted eight moves, the pieces lying on the crosspoints represented by the underlined letters will be removed one by one, so that in the end only one piece remains on the board at the crosspoint *f*. It may be noted that in these eight moves, there are six in which the pieces from the extreme corners are moved inwards.

The moves can be varied, but for the correct play the principles enunciated above should be observed, otherwise more than one piece remain on the board and the person playing the game loses it.

Remarks.—Humphries[1] described a similar game from the Karwi Subdivision in the United Provinces under the name *Kowwa Dand* but remarked that 'I had great difficulty in learning the rules of this game, as the man who gave me the diagram had forgotten them, and the *patwari*, the only man in the village who knew the game at all, had not played it for years'. In the Teesta Valley, I was informed that the game is played only by a few intelligent people, and is by no means commonly understood.

I was informed that the vernacular name of the game *Lam Turki* literally means 'going straight', in which probably reference is made to the characteristic straight moves that are made in playing this game.

Attention may here be directed to *Kaooa*, a type of sedentary games prevalent in the Central Provinces and described by Das-Gupta.[2] The diagram used for playing this game is identical with that of *Lam Turki* and *Kowwa Dand*.

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[1] Humphries, *Journ. As. Soc. Bengal* (N.S.) II, p. 126 (1906).

[2] Das-Gupta, *Journ. As. Soc. Bengal* (N.S.) XX, p. 167, 1924 (1925).

Kaooa is, however, a peculiar kind of tiger-play which is played by two persons, one in charge of seven *kaooas* and the other in charge of one 'tiger'. It will thus be seen that though the figures used in all these games are absolutely identical, there is a great deal of difference in the actual playing of the games.

BAGHCHAL, BAGHCHAKAR, OR CHAKRACHAL

Description.—This is a kind of tiger-play in which two persons are required to play the game, one plays with four 'tigers' and the other with twenty 'goats'. The diagram is given below (Fig. 2).

The four 'tigers' are placed at the four points A B C D, and then one by one the 'goats' are brought on the board. As soon as the first 'goat' is placed on the board, one of the 'tigers'

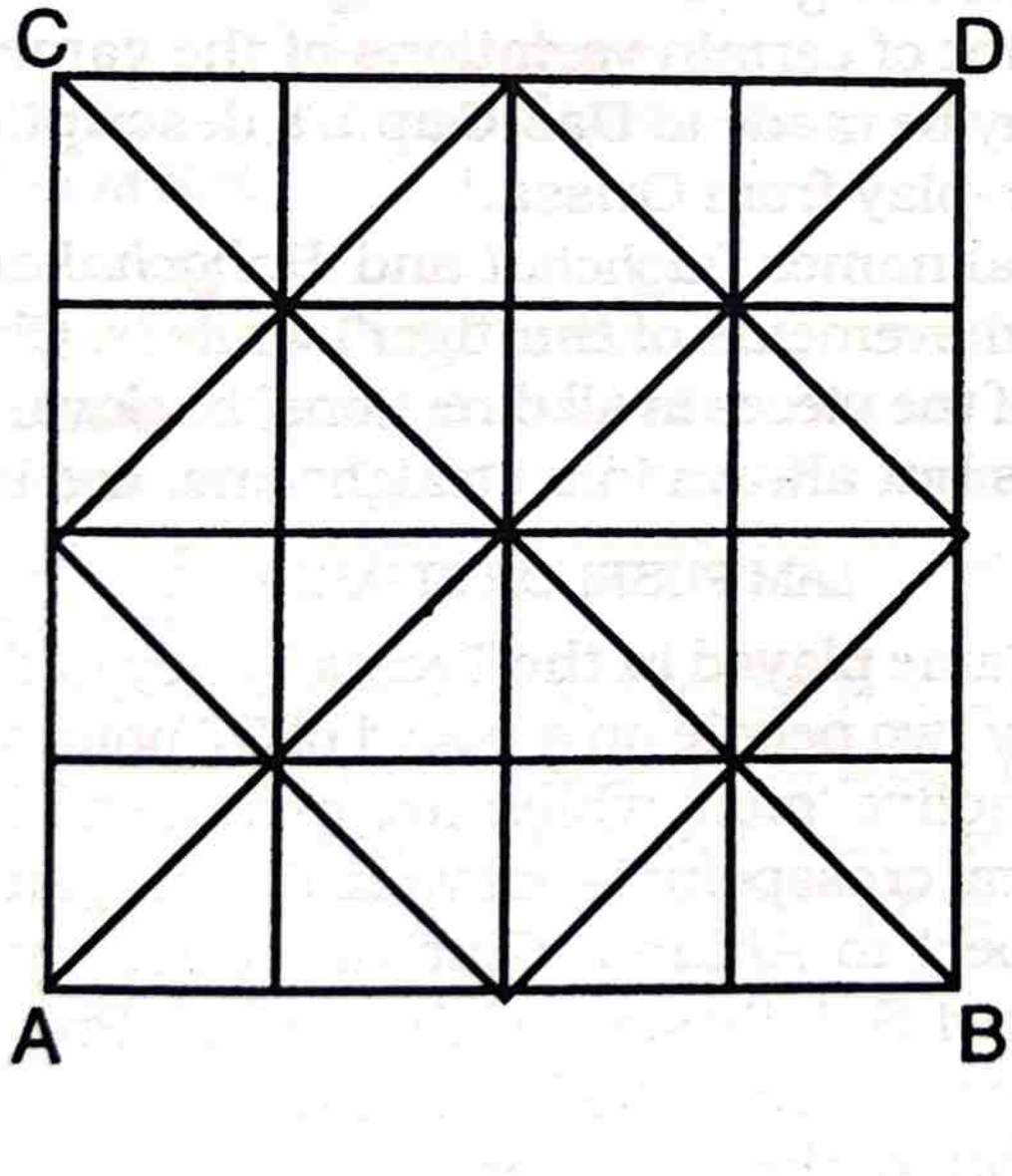

Fig. 2. The board used in playing the game *Baghchal, Bahgchakar* or *Chakrachal.*

moves to capture it. This can only happen when the 'goat' is between the 'tiger' and a vacant point in a straight line. The 'goats' are captured as in draughts by jumping over. No 'goat'

is to be moved from its place on the board till all the 20 'goats' have been placed on the board one by one. Then the pieces can be moved forwards and backwards on adjacent vacant places. The effort of the player holding the 'goats' is to checkmate the movements of the 'tigers'. When either all the 'goats' are captured or all the 'tigers' are checkmated, the play is finished. The person who performs one or the other of the two feats is the winner.

Remarks.—In India there are several types of tiger-play in which the number of 'goats' may be 24, 20, 12 or 3, while the number of 'tiger' may be 1,2 or 4. Though the underlying principle is the same in all these games, in actual practice the methods for playing each game are different. The essential features of the game from the Teesta Valley are : (i) the four 'tigers' are placed at the commencement of the game at the extreme four corners and the 'goats' are brought on the board one by one, (ii) once placed, no 'goat' is to be moved from its position till all the 'goats' have been placed on the board. For a brief account of certain variations of the game of this type, reference may be made to Das-Gupta's description of the two types of tiger-play from Orissa.[1]

In the local names *Baghchal* and *Bahgchakar* reference is made to the movements of the 'tiger', while in *Chakrachal* the movements of the pieces in all directions, backwards, forwards, and sideways but always in a straight line, are indicated.

LAM PUSRI OR SIPAHI KAT.

Another game played in the Teesta Valley is the *Lam Pusri*. It is played by two people on a board of 37 points, each player has 18 distinctive 'men' which are arranged in such a way that the central crosspoint is left vacant. This game is identical in every respect to *Ahtarah Gutti* described by Humphries[2] from the Karwi Subdivision of the United Provinces and to *Atharagutiala teora* described by Das-Gupta[3] from the Central Provinces. Both of these authors have given rules for playing the game so I refrain from giving further particulars about it here. The diagram used in playing the game is given below (fig. 3).

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[1] Das-Gupta, *Journ. As. Soc. Bengal* (N.S.) XXII, pp. 212, 213, 1926 (1927).
[2] Humphries, *ibid.*, (N.S.) II, pp. 121, 122, fig. 3 (1906).
[3] Das-Gupta, *ibid.*, (N.S.) XX, p. 165, 1924 (1925).

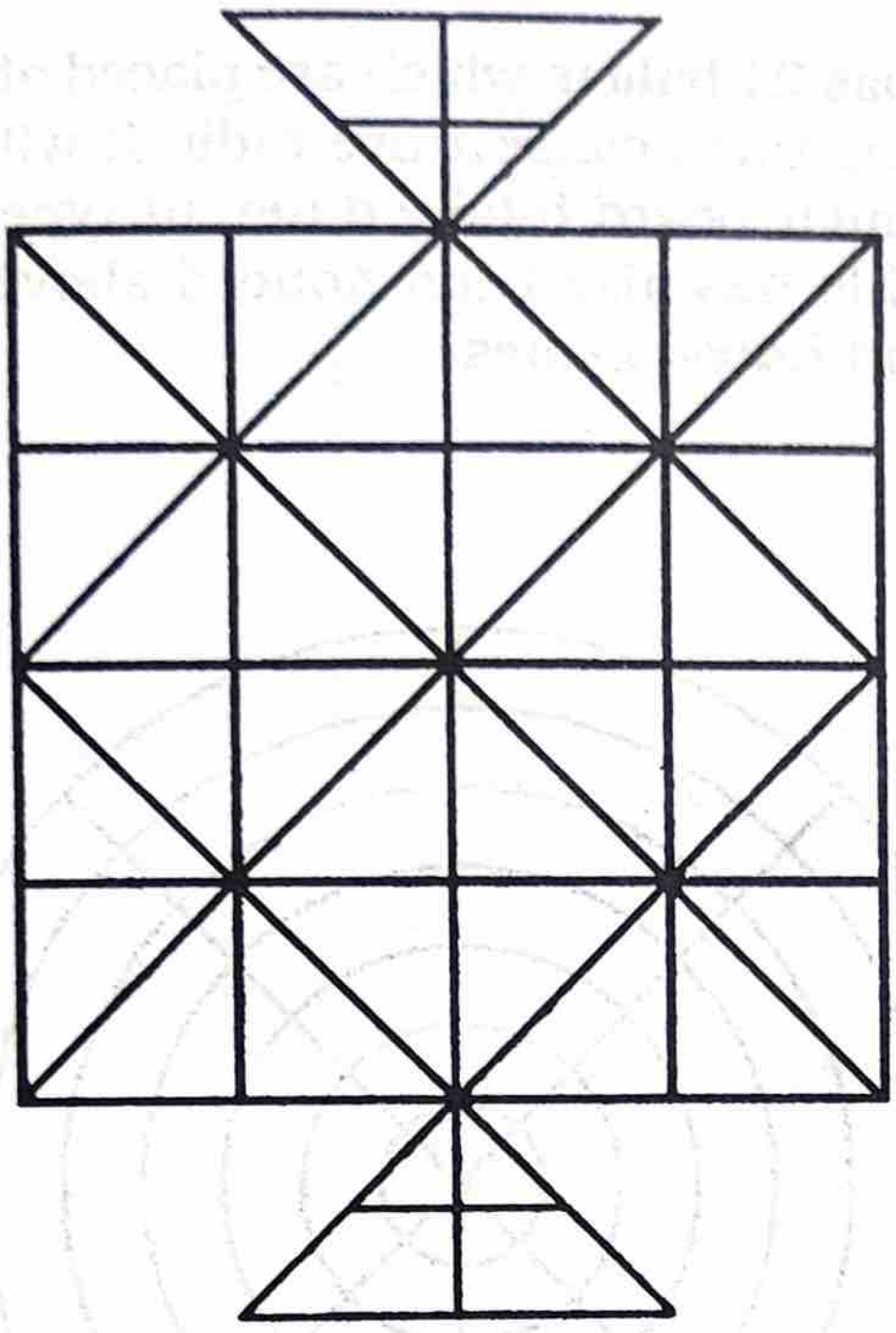

Fig. 3. The board used in playing the game *Lam Pusri* or *Sipahi Kat.*

I was informed that *Pusri* means tail, and by using this term in the name of the game reference is made to the triangular pieces at two ends of the diagrams which are likened to tail as they form outgrowths of the big central section of the diagram.

There is yet another game played in the Teesta Valley about which I could not obtain full particulars from the old man, nor Mr. F.D. Raj has been able to find out the rules about playing it. The diagram (Fig. 4) used in playing this game is similar to that used for *Gol-ekuish*[1] which consists of seven concentric circles divided by three diameters, thus there are 42 points in which the diameters meet the circles. Two players are required to play the game, one has a large number of 'goats' (unfortunately the number could not be ascertained) and the other plays with only one 'tiger'. The usual rules of the tiger-play are observed, but the movement can be in all directions and not only along straight lines. In *Gol-ekuish*,

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[1] Das-Gupta, *ibid.*, (N.S.) pp. 166, 167, fig. 3, 1924 (1925).

each player has 21 ballets which are placed at 21 crosspoints arranged along three consecutive radii. It will thus be seen that on a similar board totally different types of games can be played. This has also been noticed above in the case of *Lam Turki* and *Kaooa* games.

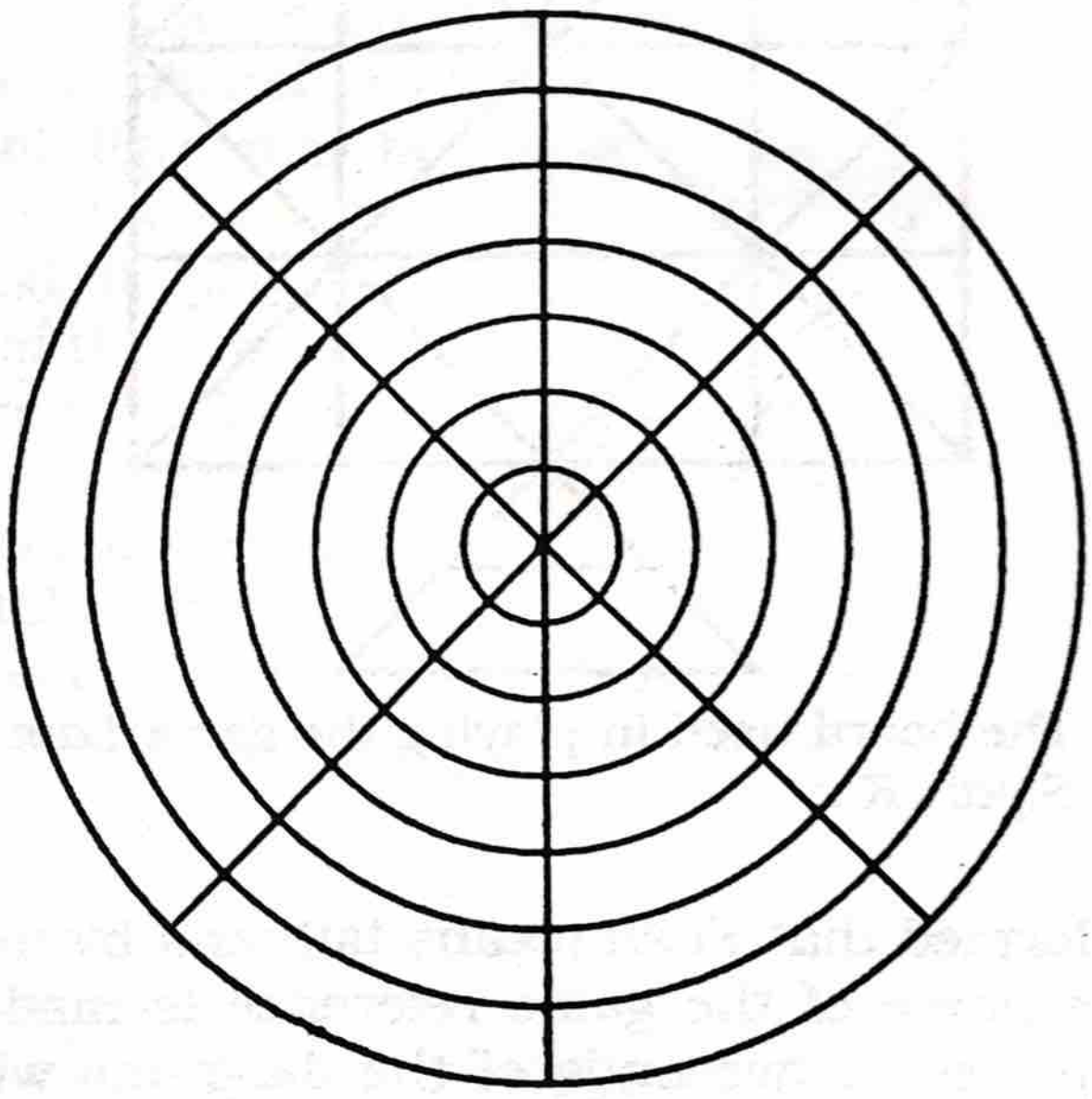


Fig. 4. The board used in playing the game *Gol-ekuish* of the Central Provinces.

A FEW TYPES OF SEDENTARY GAMES OF LOWER BENGAL

JATINDRA MOHAN DATTA*

The type of sedentary games described below are played by the local people of the districts of 24-Parganas, Howrah, and Hooghly. There is an erroneous impression that these games are not indigenous but have been imported from up-country. The author (an inhabitant of Panihati, about 10 miles north of Calcutta on the Ganges) learnt these games about 35 years ago. It has been ascertained from old men of 70 and over that the games were prevalent in their boyhood. The author has noticed them being played by the Bengalees at Asansol, Burdwan, Midnapore, Ranaghat, Santipur, Khulna, and Barisal.

TANT-FANT

The diagram used for the game of *Tant-fant* is shown in figure 1. It is generally drawn on floor with a piece of charcoal or broken brick. Two persons play the game. At the commencement of the game each player places three distinctive pieces on the three cross-points (ABC or DEF) of his side of the square. In the first move, a piece is shifted to the central line TT. The game is won, when all the three pieces belonging to a player lie in a straight line anywhere (horizontally, vertically, or obliquely) with the exception of the starting line.

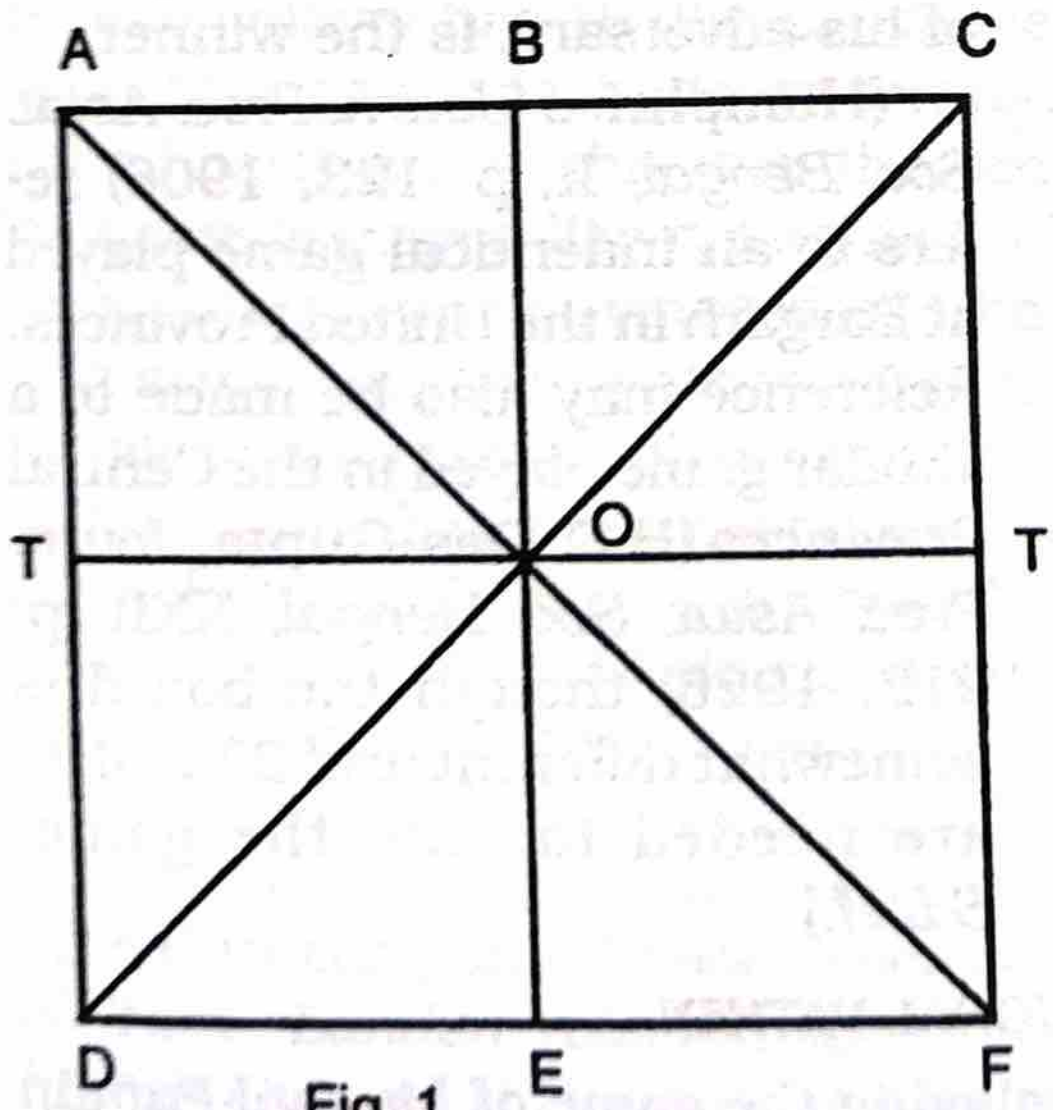


Fig. 1

* Communicated by Dr. S.L. Hora

[H. Das-Gupta has described this type of game from Vikrampore (*Quart. Journ. Bangiya Sahitya Parishad*, XIV, pp. 242,243, 1314 B.S.) under the local name of *Tin-guti pait pait*, but unfortunately his description is very meagre. In the game described above no piece of the adversary is to be removed from the board, but in the Vikrampore game as soon as three pieces are arranged in a straight line, a piece of the adversary is removed from the board. In this way the winner of the game will be one who removes from the board all three pieces of his opponent without losing any one of his piece. According to Das-Gupta the popularity of the game is on the wane. *S.L.H.*]

LAU-KATA-KATI

The diagram used in playing the game of *Lau-kata-kati* is shown in figure 2. The game is played by two persons with 18 pieces; each player places his nine distinctive pieces on the nine cross-points of his triangle leaving the apex vacant. In the first move, a piece is shifted to the central point O and then the usual rules of draughts are followed, with the exception that only one piece can be captured at a time. One, who captures all the nine pieces of his adversary, is the winner.

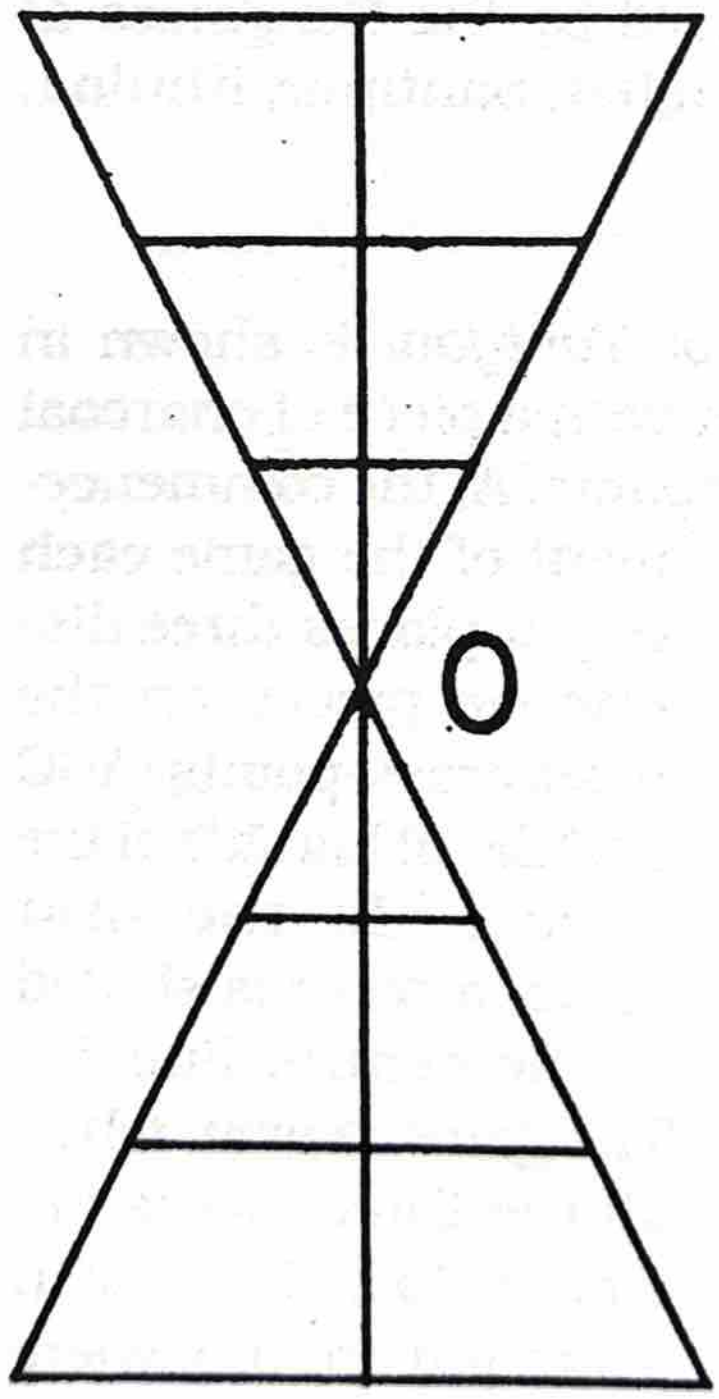


Fig. 2.

[Humphries (*Journ. Proc. Asiat. Soc. Bengal*, II, p. 123, 1906) refers to an indentical game played at Bargarh in the United Provinces. Reference may also be made to a similar game played in the Central Provinces (H.C. Das-Gupta, *Journ. Proc. Asiat. Soc. Bengal*, XXII, p. 212, 1926) though the board is somewhat different and 22 ballets are needed to play the game. *S.L.H.*]

MUGHAL-PATHāN

The diagram used in playing the game of *Mughal-Pathān* (in the vernacular name reference is made to the well-known

wars between the Moghuls and the Pathāns in Bengal) is shown in figure 3. Two players are necessary to play the game,

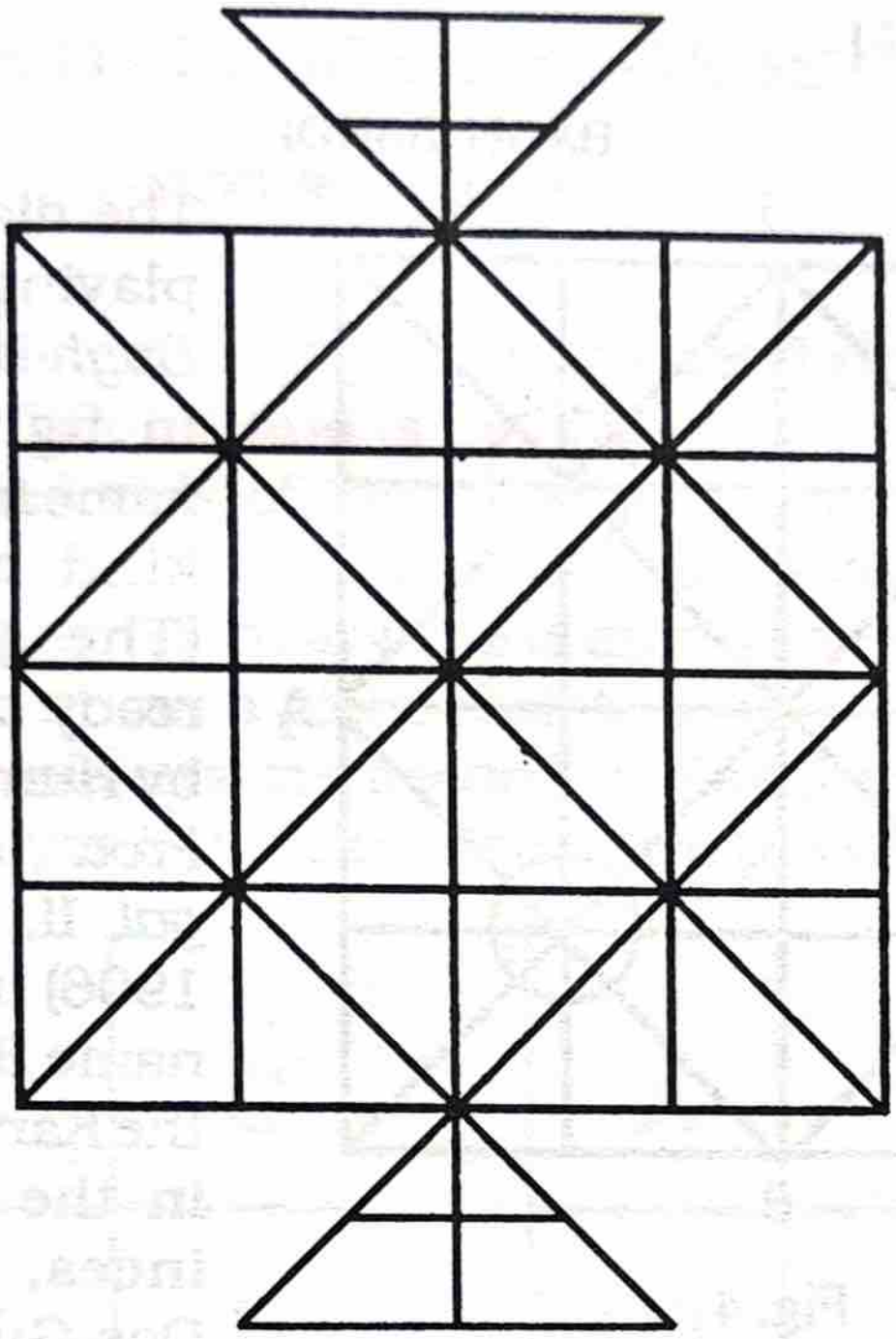


Fig. 3

and each player has 16 distinctive pieces. At the commencement of the game, each player arranges his pieces in his half of the board and in this way the central line is left vacant. The game is played like draughts and two or more pieces of the opponent can be removed at a time.

In some localities, another horizontal line is drawn in each triangle and then each player has 19 pieces to play with.

[This game has been described by H. Das-Gupta (*Quart. Journ. Bangiya Sahitya Parishad*, XIV, pp. 239, 240, 1314 B.S.) under the title of *Sola-guti Mangal Pata*, in which reference is made to 16 pieces used by each player as well as to the Moghul-Pathān wars in Bengal. The board is used in playing several types of games and reference may here be made to the Bornean game *Rimoe* described by Jacobson (*Tijdsch. Ind. Taal-, Landen Volkenkunde*, LVIII, pp. 8-10, 1919), the *Ahtarah Gutti* of U.P. described by Humphery (*Journ. Proc. Asiat. Soc. Bengal*, II, p. 121; 1906), *Atharagutiala teora* of

C.P. described by H.C. Das-Gupta (*Journ. Proc. Asiat. Soc. Bengal*, XX, 166, 1924), *Lam Pusri* or *Sipahi Kat* of the Teesta Valley (*Journ. Proc. Asiat. Soc. Bengal*, XXIX, p. 10, 1933), etc. etc. *S.L.H.*]

BAGH-BANDI

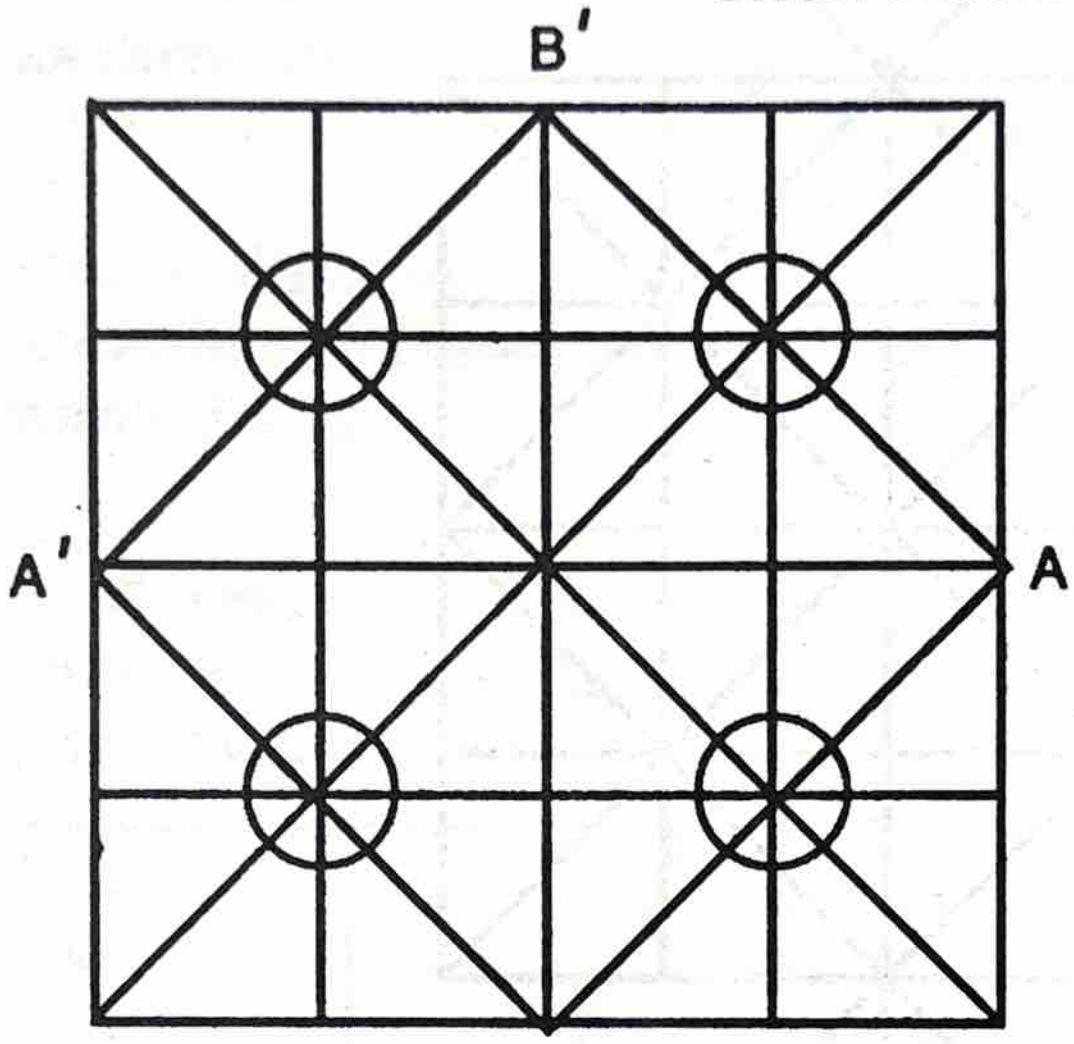


Fig. 4

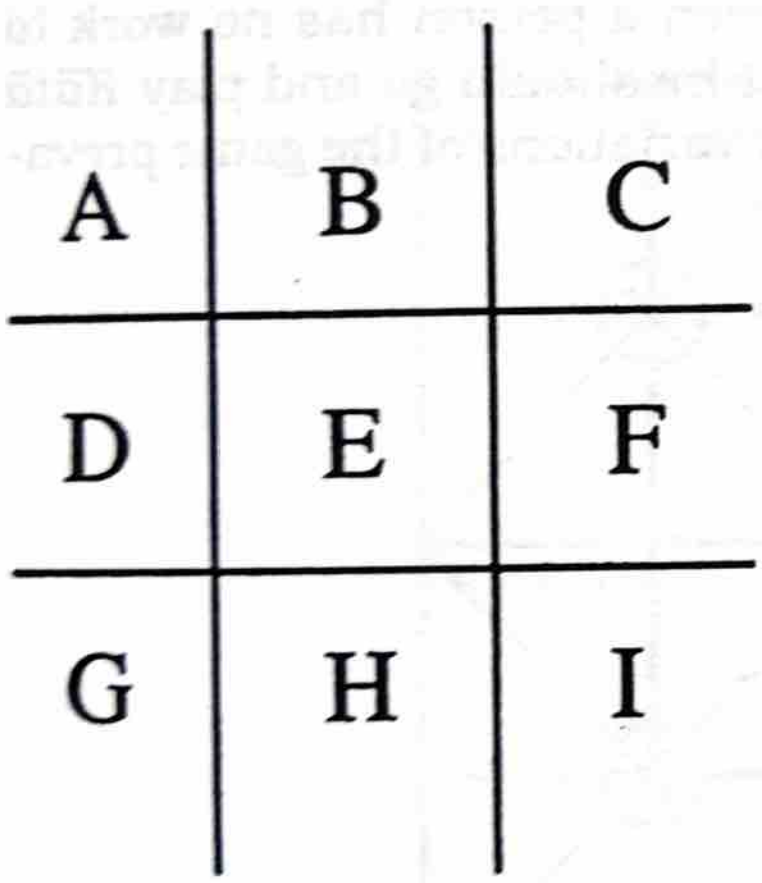
The diagram used in playing the game of *Bagh-bandi* is shown in figure 4. As its name indicates, it is a kind of tiger-play. [The game has already been described by Humphries (*Journ. Proc. Asiat. Soc. Bengal*, II, pp. 123, 124, 1906) under the local name *Bagh Gutti* from the Karwi Subdivision in the United Provinces, and by H.C. Das-Gupta from British Garhwal as *Bāgh-Batti* (*Journ. Proc. Asiat. Soc. Bengal*, XXIII, p. 297, 1927). *Chabbis-guti Bagh-chal* described by B. Das-Gupta from Vikrampore (*Quart. Journ. Bangiya Sahitya Parishad*, XIV, pp. 240, 241, 1314 B.S.) is a similar game, but is played with 26 instead of 22 pieces. Its popularity is said to be on the wane. Attention may also be directed to a Punjab game called *Sher-bakar* (*H.C. Das-Gupta, ibid.*, XXII, p. 145, 1926) played on an identical board but with 19 pieces as 'goats' instead of 20. In playing *Sher-bakar*, 15 pieces are distributed equally in 3 circles, whereas the remaining 4 pieces are placed in the 4th circle at the commencement of the game. *S.L.H.*]

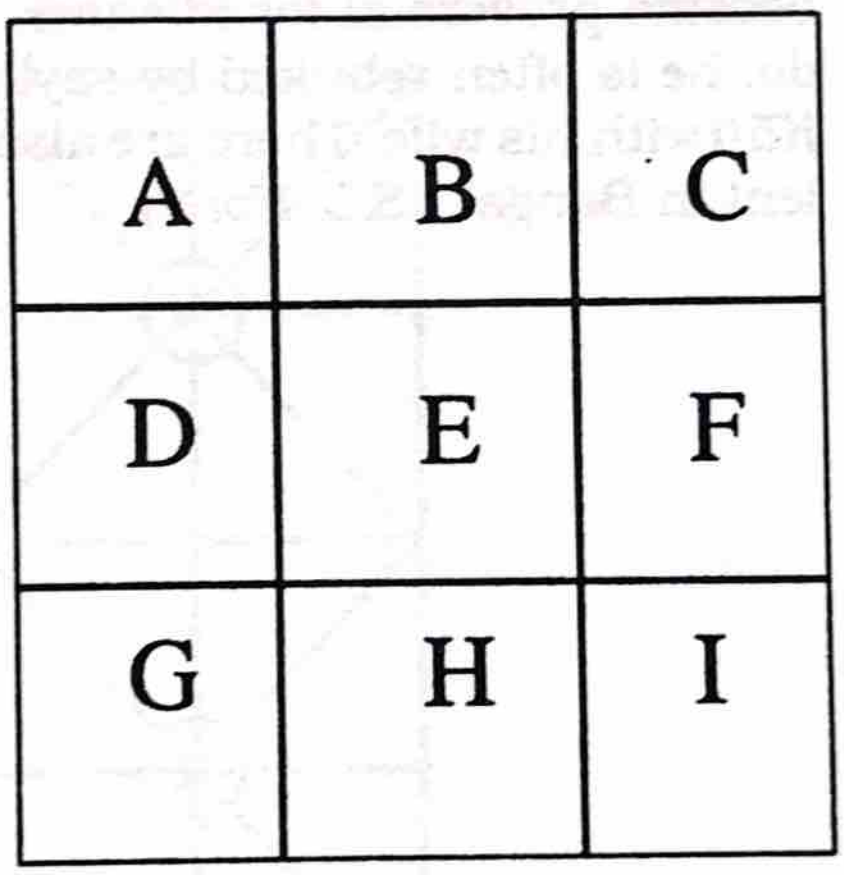
The author has seen the diagram of Bagh-bandi on the lid of an old-fashioned wooden chest, which from the traditions of the family of the owner must be 125 years old.

ON A TYPE OF SEDENTARY GAME OF BENGAL

JATINDRA MOHAN DATTA*

The type of sedentary game described below is popularly known as *Tuk-tak* and is usually played by children and young boys and girls of Bengal. The diagrams used for the game are shown below, but it may be noted that the one without the outer boundary line is more commonly used. The diagram is drawn on a piece of slate or on a floor with charcoal, and two players are needed to play the game. To start with, each player has three distinctive pieces, such as *cow-*





ries (shells) and tamarind seeds, or distinctive marks, such as x and ⊙, are chosen to play the game. The player, who begins, places one of his pieces or mark on any of the areas marked **A,B,C,** etc. and then the other player occupies any other area. Playing thus alternately, all the six pieces are brought on the board. When all the six pieces are brought on the board, then the pieces are moved to adjacent vacant places but there is no jumping over or catching the pieces of the adversary. Effort is made to get one's three pieces in a straight line, *i.e.* **ABC, ADG, AEI,** and so on. One, who achieves this

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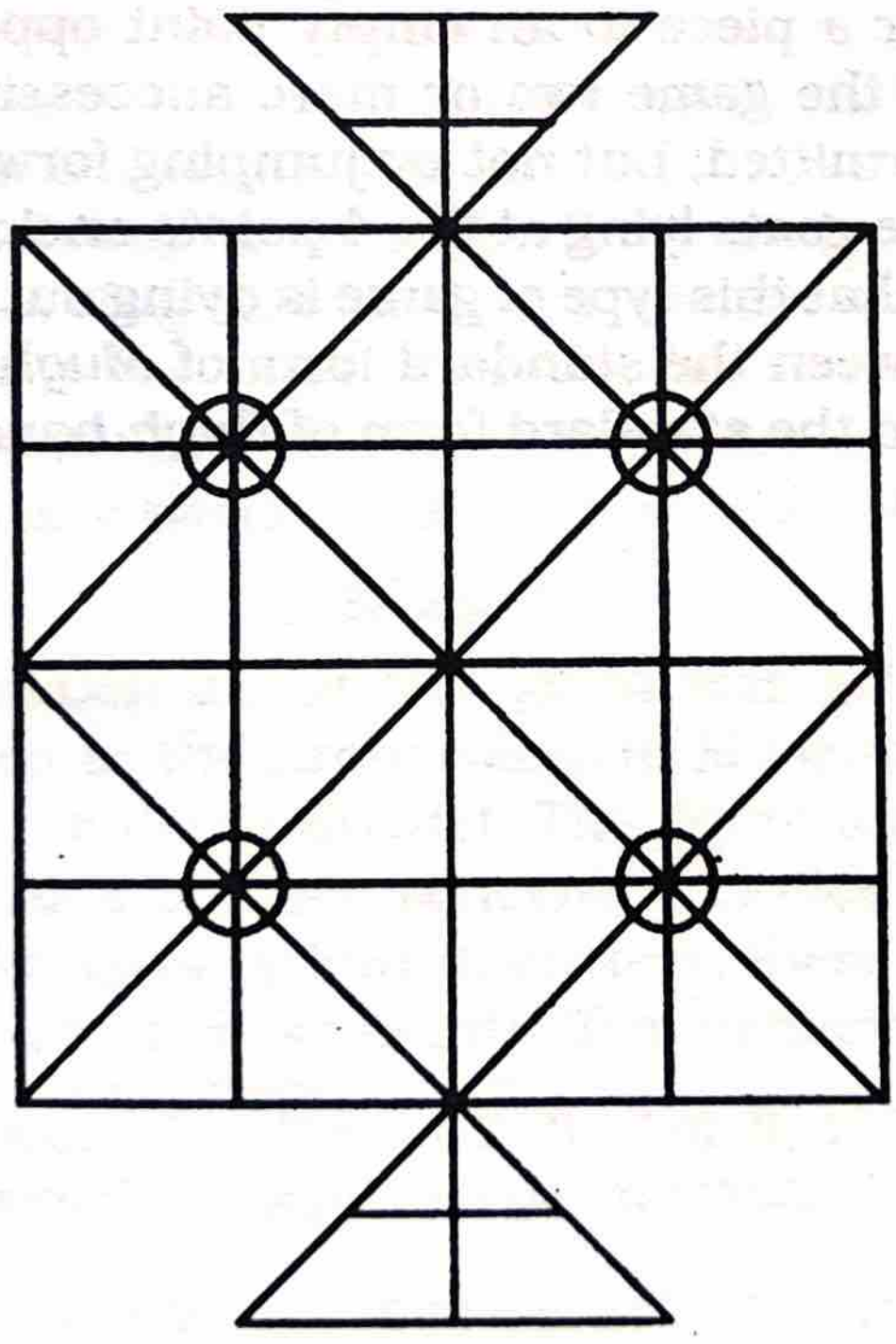
* Communicated by Dr. S. L. Hora

A NEW TYPE OF *BAGH-BANDI* OR TIGER-PLAY PREVALENT AT BASIRHAT IN LOWER BENGAL

JATINDRA MOHAN DATTA

Basirhat town is the head-quarters of the Basirhat Sub-division in the east of the district of 24-Parganas. It is some 35 miles east of Calcutta. Mr. Santosh Kumar Ray informs me that the following type of *Bagh-bandi* or Tiger-play was frequently played by him in his boyhood at Basirhat. In



June 1935, I made personal enquiries at Taki from the chairman and the vice-chairman of the local municipality and other gentlemen and they all corroborated Mr. Ray.

The diagram of the game is like that of *Mughal-pathan*.[1]

[1] See *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXIX, 1933, pp. 168-169, where I described this game. See also *Journ. Proc. Asiat. Soc. Bengal*, Vol. II, p. 121, 1906; *Journ. Proc. Asiat. Soc. Bengal*, Vol. XX,

A FEW TYPES OF SEDENTARY GAMES FROM BIHAR

CHARU CHANDRA DAS GUPTA

While on an archaeological tour in Bihar and the United Provinces in the month of October, 1934, I collected an account of a few types of sedentary games prevalent in the Patna and Gaya districts of Bihar. Among scholars who have studied Indian sedentary games Humphries,[1] B. Das Gupta,[2] Das-Gupta,[3] Hora[4] and Dutta[5] should be specially mentioned. The games about which I was able to collect information are eight in number and are known as *Bāra-guṭi*, *Nāo-guṭiyā*, *Bāghā-guṭi*, *Rām-tir*, *Biś-guṭiyā*, *Bāraṇ-guṭiyā*, *Nāo-guṭiyā-baiṭhānekā* and *Sātgharoyā*. In this short communication I shall briefly describe those games which have not been formerly noticed and shall also discuss similar sedentary games known from many parts of India under different names.

1. BĀRA-GUṬI

The information about this game was gathered from a bearer attached to the Archaeological Museum at Nalanda; he belongs to the Patna district. The figure used for playing the game consists of three concentric circles which are divided into eight parts by four diameters; these meet the concentric circles at 24 cross-points. Two persons are required

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[1] *Journ. Proc. Asiat. Soc. Bengal*, (N.S.), Vol. II, 1906, pp. 117-27.

[2] *Quarterly Journal Bañgiya Sāhitya Parishad*, Vol. XIV, pp. 214-45.

[3] (i) *Calcutta Review*, March, 1923, pp. 510-13; (ii) *Journ. Proc. Asiat. Soc. Bengal* (N.S.), Vol. XIX, 1923, pp. 71-74; (iii) *Ibid.*, Vol. XX, 1924, pp. 165-69; (iv) *Ibid.*, Vol. XXII, 1926, pp. 143-48; (v) *Ibid.*, Vol. XXII, 1926, pp. 211-13; (vi) *Ibid.*, Vol. XXIII, 1927, pp. 297-99; (vii) *Ibid.*, Vol. XXVI, 1930, pp. 411-12; (viii) *Ibid.*, Vol. XXVII, 1931, pp. 209-10.

[4] (i) *Ibid.*, Vol. XXVII, 1931, pp. 211-12; (ii) *Ibid.*, Vol. XXIX, 1933, pp. 5-11.

[5] (i) *Ibid.*, Vol. XXIX, 1933, pp. 167-70; (ii) *Ibid.*, Vol. XXX, 1934, pp. 17-18.

Bagh-bandi or Tiger-play is played with 2 tigers and 32 goats. The standard diagram of the game *Bagh-bandi* is given in *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXIX, 1933, p. 169. Other variations of the game are described in *Journ. Proc. Asiat. Soc. Bengal*, II, pp. 123-124, 1906; *Journ. Proc. Asiat. Soc. Bengal*, XXIII, p. 297, 1927; *Quart. Journ. Bangiya Sahitya Parishad*, XIV, pp. 240-241, 1314 B.S.; *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXII, p. 145, 1926.

The diagram of the new variety of *Bagh-bandi* is shown in the accompanying figure.

The game is played with 2 tigers and 32 goats. The goats are placed in groups of 8 at the points enclosed by circles in the diagram at the beginning of the game. The 2 tigers can be placed anywhere on the board. The usual rules of capture by jumping over a piece to an empty point opposite apply. In this form of the game two or more successive captures of goats are permitted; but not by jumping forward and backward over the goats lying at the 4 points enclosed by circles.

It is said that this type of game is dying out. It seems to be a hybrid between the standard form of *Mughal-pathan* with 32 pieces and the standard form of *Bagh-bandi* with 2 tigers and 20 goats.

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p. 166, 1924; *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXIX, p. 10, 1933; *Quarterly Journal Bangiya Sahitya Parishad*, Vol. XIV, pp. 239-240, 1314 B.S.

first, is the winner of the game, but it often happens that no one gets his three pieces in a straight line within a specified time and then the game ends in a draw.

The game is usually played by idle people and vagabonds, and mothers often dissuade their children from playing this game for long periods as it is believed that the child becomes *Lakshmi-chāṛā* or devoid of wealth (poor).

The writer has seen this game being played at Asansol and Dhanbad, but has never seen people of Lower Bengal playing it.

[The principle of play in this game is the same as that of *Tant-fant* (Datta, *Journ. As. Soc. Bengal*, N.S. XXIX, p. 167, 1933) or *Tin-guti pait pait* (B. Das-Gupta, *Quart. Journ. Vaṅgiya Sāhitya Pariṣat*, XIV, p. 243, 1314 B.S.) though the diagrams and the mode of play in the beginning are different, especially in *Tant-fant*. *Tuk-tak* is fairly common among the residents of Calcutta where it is called *Naw Kātā Kāti* and is always played with distinctive marks. It has become proverbial for idleness, for when a person has no work to do, he is often rebuked by saying that he should go and play *Kātā Kāti* with his wife. There are also other variations of the game prevalent in Bengal. *S.L. Hora.*]

to play this game, 12 cross-points on four contiguous radii belonging to each of them. Each player provides himself with twelve pieces of ballets which are placed at these twelve cross-points. The rule of the game is that, at the beginning, one of the two rival players shifts one of his ballets to the centre which is the only vacant point; then his opponent shifts one of his ballets to the vacant cross-point. The usual rule of capturing a piece of the adversary by jumping over it to the next cross-point, if it is vacant, is followed, quite irrespective of whether the piece is on the diameter or on the circumference, for the pieces may be moved not only on the radii but also along the arcs of the circumference. In this way the player who can capture all the pieces of the opponent wins the game.

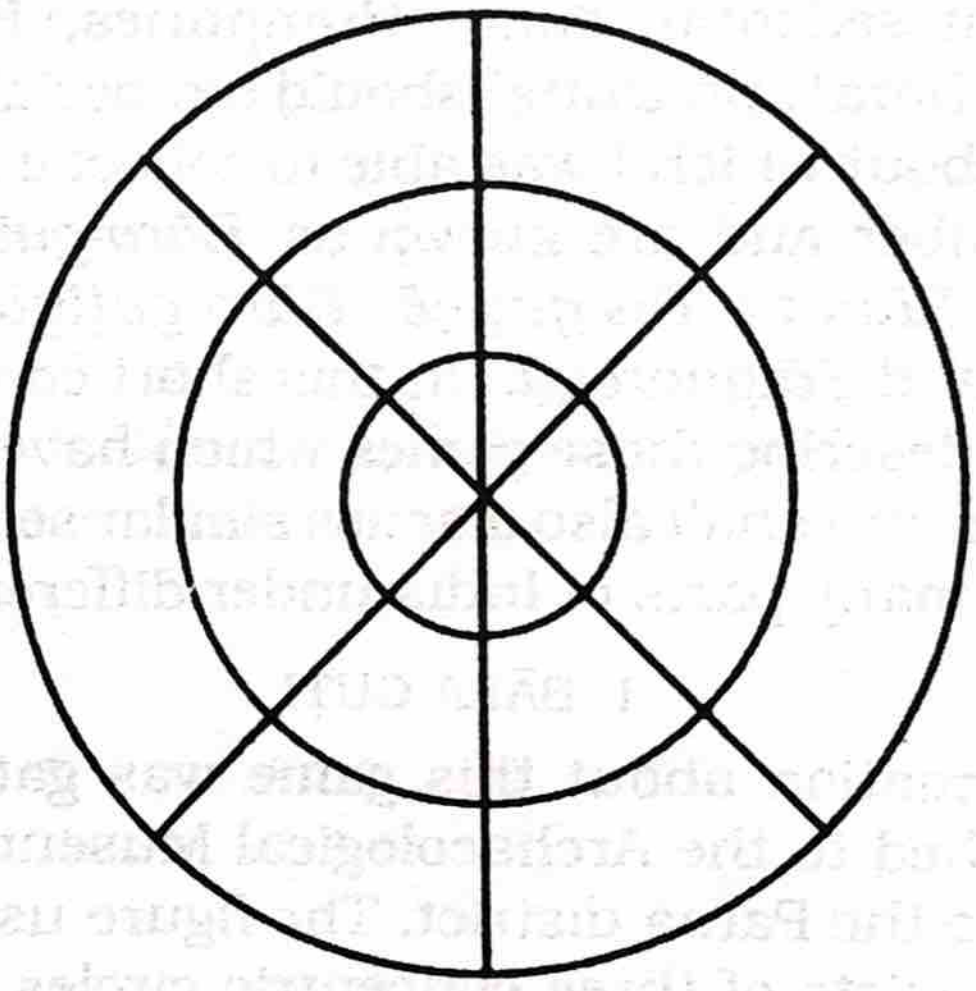

Fig. 1 Diagram for *Bāra-guṭi*

There is a great similarity between this game and two other Indian games, *Gol-ekuish*[6] prevalent in the Central Provinces and *Pretoa*[7] prevalent in the Chapra district of Bihar; both have been described by Das-Gupta. The points of difference are that while in *Gol-ekuish* the diagram consists of seven concentric circles divided into six parts by three diameters and in *Pretoa* the figure consists of three concentric circles divided into six parts by three diameters, in this game the

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6 *Journ. Proc. Asiat. Soc. Bengal*, (N.S.), Vol. XX, 1924, pp. 166-67, No. 3 fig. 3.

7 *Ibid.*, Vol. XXVII, 1931, pp. 209-10.

figure consists of three concentric circles divided into eight parts by four diameters. In a note on *Pretoa* Hora observes, 'I was also informed that sometimes this game is played with 12 pieces *(Bāra-guṭiyā)* and in that case there are four instead of three concentric circles'.[8] Thus the diagram used for this game is also different to some extent from the variety mentioned by Hora.

2. NĀO-GUṬIYĀ

The information of this game was obtained not only from the said bearer but also from an inhabitant of Kumrahar, a

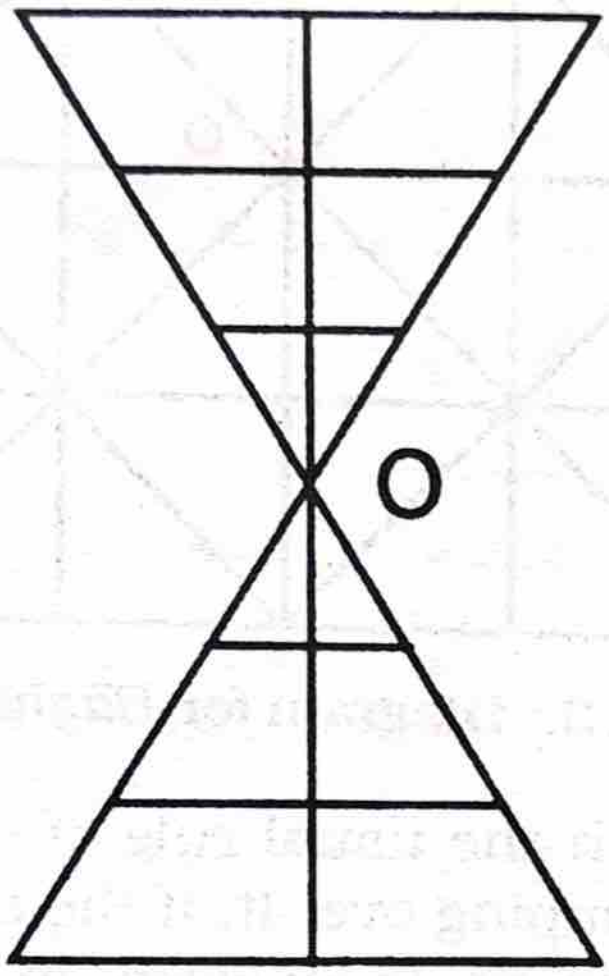

Fig. 2. Diagram for *Nāo-guṭiyā*

village near Patna. This game is known as *Nāo-guṭiyā* because two players, each having nine pieces, are required to play it.

There is a great similarity between this game and another game called *Egāra-guṭi* prevalent in the Central Provinces.[9] In the Central Provinces game each player has eleven ballets while in this game we have nine ballets in each player's possession. Moreover the diagram used for the Central Provinces game is different and more complex. But the Bihar game under description is exactly similar to the game called *Lāu-kāṭā-kāṭi* prevalent in Lower Bengal[10] and another game played at Bargarh in the United Provinces described by Humphries.[11]

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8 *Ibid.*, Vol. XXVII, 1931, p. 212.
9 *Journ. Proc. Asiat. Soc. Bengal*, (N.S.), Vol. XXII, 1926, p. 211, fig.1.
10 *Ibid.*, Vol. XXIX, 1933, p. 168.
11. *Ibid.*, Vol. II, 1906, p. 123, fig. 5.

3. BĀGHĀ-GUṬI.

The information of this game was obtained from the said bearer. It is played by two men—one having 21 ballets placed together in the central point marked O and another having one piece as the 'tiger' placed at any cross-point at the beginning of the game. In the first move one ballet is pushed to one

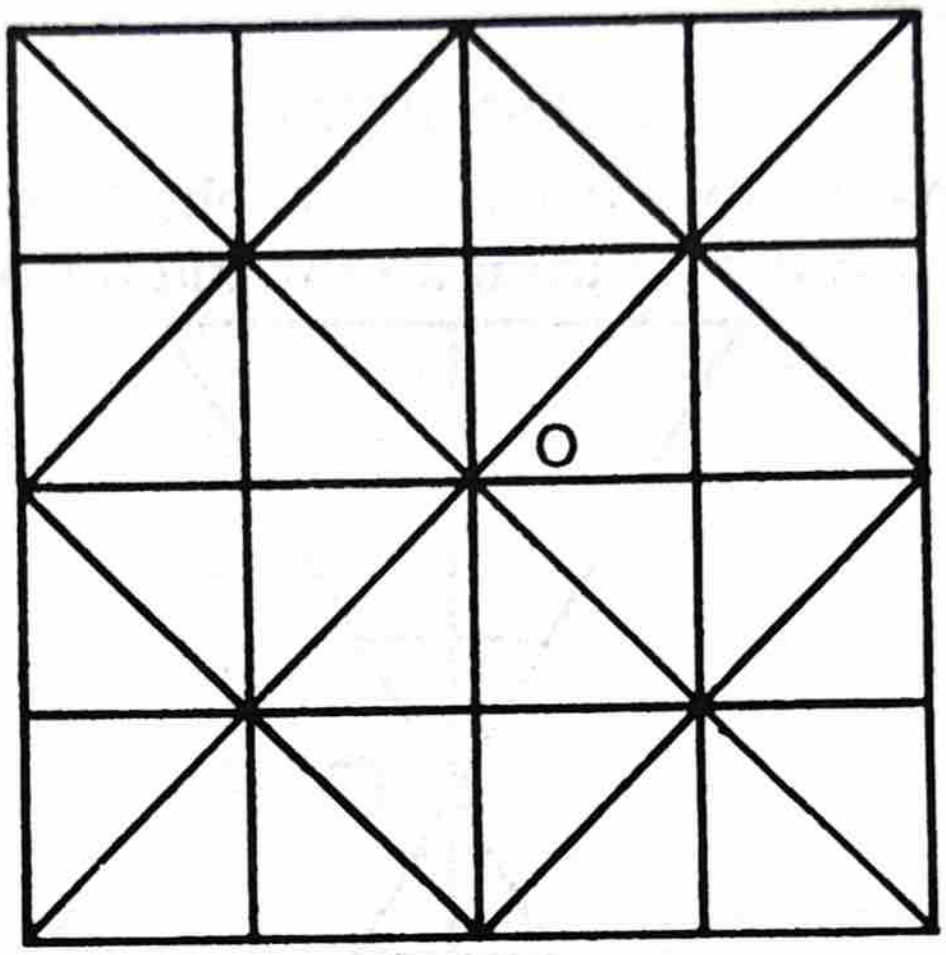

Fig. 3.: Diagram for *Bāghā-guṭi*

cross-point and then the usual rule of capturing a piece of the adversary by jumping over it, if the cross-point immediately next to it is vacant, is followed. In this way either the ballets may be captured by the 'tiger' or the 'tiger' may be 'imprisoned' by the ballets. It is also important to note that in course of the game, if the 'tiger' comes to a cross-point immediate to the central cross-point marked O, then the 'tiger' can capture not more than one ballet out of many which may be in the central cross-point.

So far as my knowledge goes, nobody has described this game beforehand. Its method of playing is quite different from many games whose diagrams are very similar to that of this game.[12]

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[12] For this point compare the Orissan tiger-game (*Journ. Proc. Asiat. Soc. Bengal*, (N.S.), Vol. XXII, 1926, p. 212, fig.2), the *Sher-Bakar* game prevalent in the Punjab (*Ibid.*, Vol. XXII, 1926, p. 145, fig.4), and the *Bāgh Baṭṭi* game prevalent in British Garhwal (*Ibid.*, Vol. XXIII, 1927, p. 297). In all these games the playing boards are similar to that used in the game under discussion but the method of playing is totally different.

4. RĀM-TIR

The information of this game was also obtained from the said bearer. In the diagram there are 81 cross-points of which the central cross-point remains vacant while each player

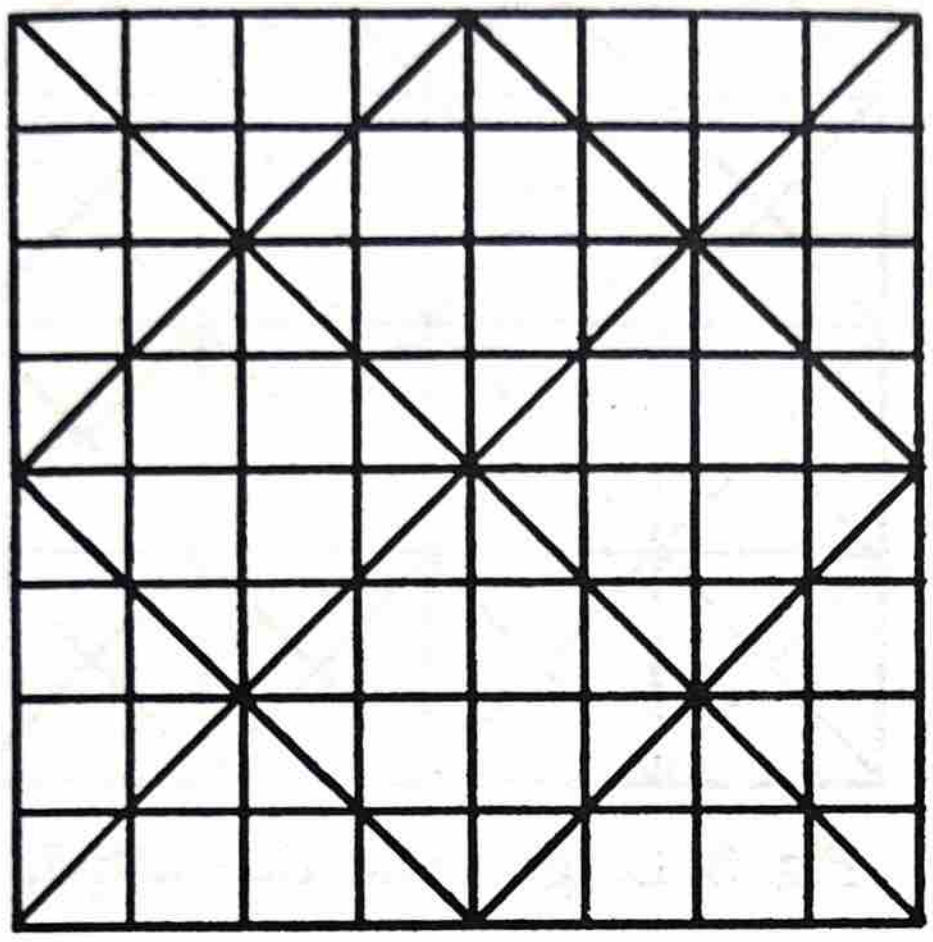

Fig. 4. Diagram for *Rām-tir*

places 40 ballets at 40 cross-points in each half of the board. Then the usual rules mentioned in the case of another similar game called *Ratti-Chitti-Bakri* and noted below are followed.

This game is very similar to a Punjab game called *Ratti-Chitti-Bakri* (Red-White-Goats) described by Das-Gupta,[13] the only point of difference being that the boards used for these two games are somewhat dissimilar. The meaning of the word *Rām-tir* could not be explained by the man who described this game to me.

5. BIŚ-GUṬIYĀ

The information of this game was obtained from an inhabitant of Kumrahar, a village near the modern city of Patna. The game is played by two players, each having 20 ballets. The central point marked O is left vacant. The method of playing this game is exactly similar to that of the game called *Rām-tir* mentioned above. The main point of interest regarding this game is that in each of the sixteen small square courts there is a cross-point in the centre which is occupied by a ballet. On each side there are such eight cross-points on which

[13] *Ibid.*, Vol. XXII, 1926, pp. 146-47, fig.5. For its similarity with a Sumatran game called *Satul* see *Tijdschr. Ind. Taal-Land-en Volken-kunde*, LVIII, 1917, pp. 10-11.

each player places eight of his 20 ballets. So far as my knowl-

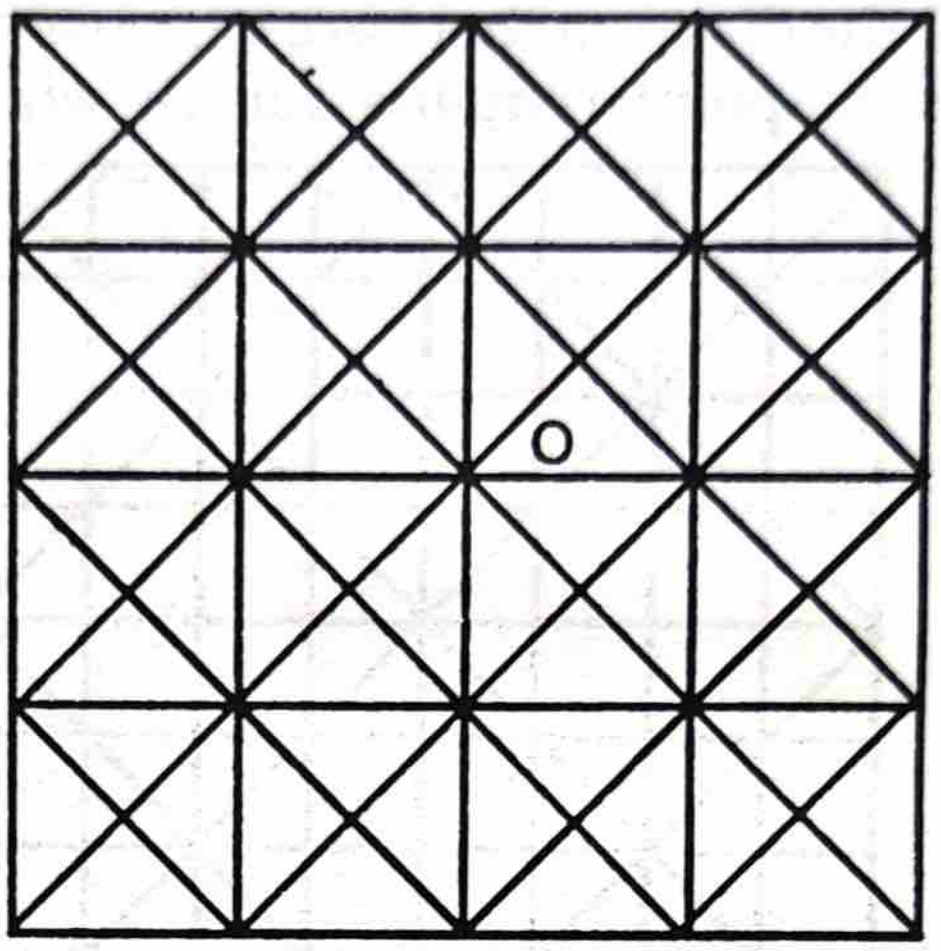

Fig. 5. Diagram for *Biś-guṭiyā*.

edge goes, nobody has described such a game having such a board.

6. BĀRA-GUṬIYĀ

The information of this game was obtained from the said inhabitant of Kumrahar. In this game each player is provided

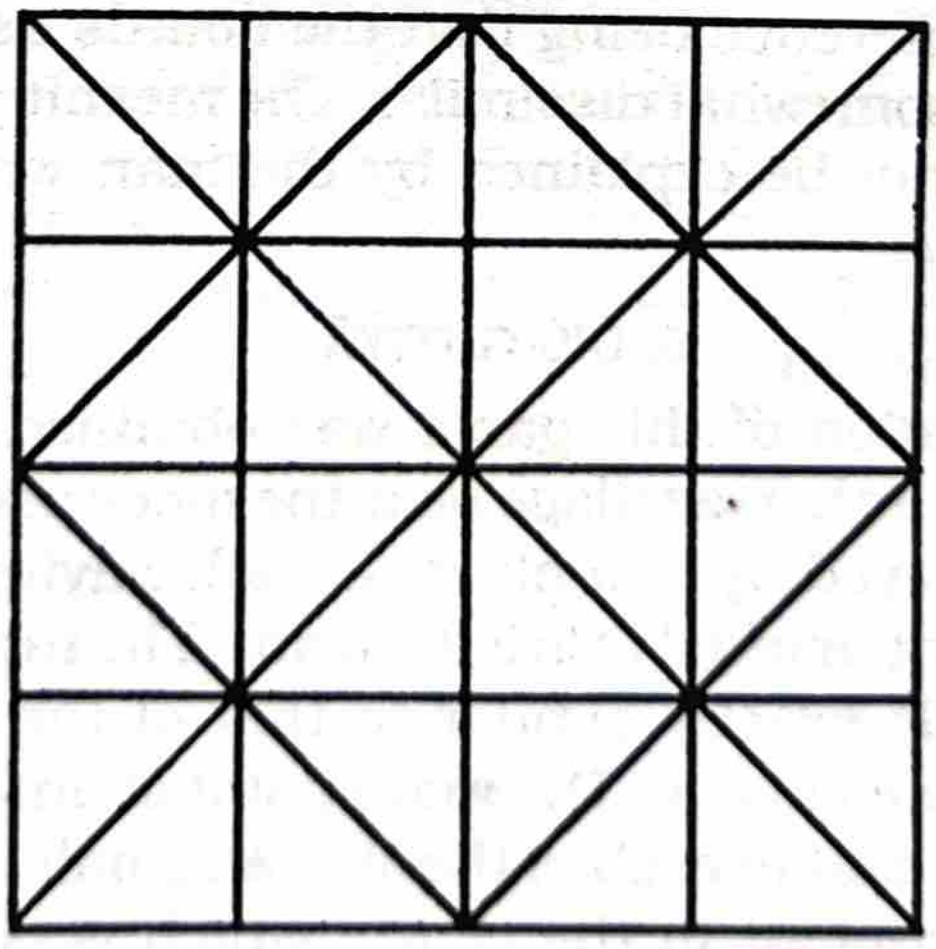

Fig. 6. Diagram for *Bāṛa-guṭiyā*

with 12 ballets and all cross-points are filled with ballets except the central one which is left vacant. The method of play-

ing is just like those of the games *Rām-tir* and *Biś-guṭiyā*. It is nothing but a simplified form of these two games.[14]

7. NĀO-GUṬIYĀ-BAIṬHĀNEKĀ

The information of this game was also obtained from the said bearer of the Archaeological Museum at Nalanda. It is a

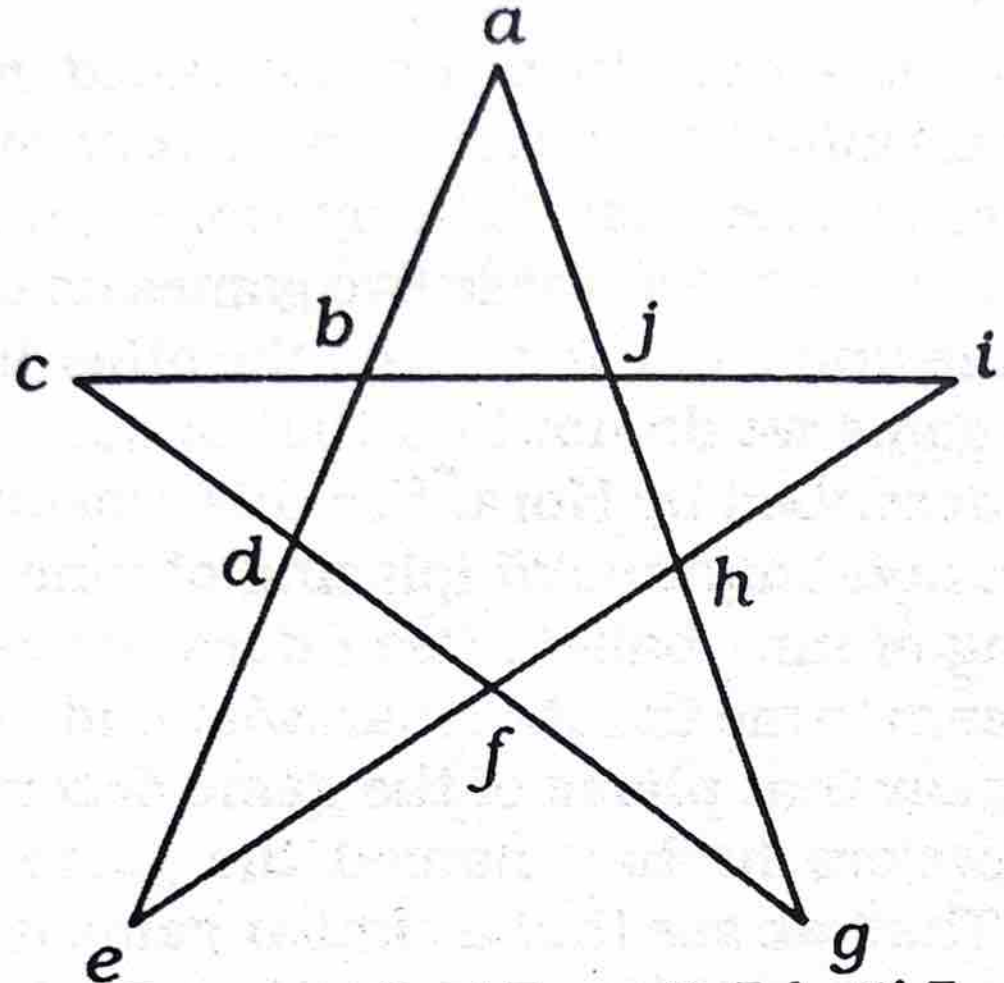

Fig. 7. Diagram for *Nāo-guṭiyā-baiṭhānekā*

kind of 'solitaire' because only one man is required to play it. The process of the game is that the player shall have nine ballets and that he shall have to place one ballet at the cross-point third from the cross-point whence the move has begun and that this vacant cross-point will be filled up by the second ballet moved from a cross-point third from the said vacant one. In this way all cross-points except one will be filled up. For example, if the first ballet is moved from the cross-point *e*, then the move will be as follows:—ed*b*, hf*e*, aj*h*, db*a*, g*fd*, j*hg*, c*bj*, f*dc*, i*hf*. When I had learnt this from him, I asked him wherein lay the 'gameness' of it because it was very easy to place nine ballets in this way in nine cross-points and it thus absolutely lacked the intricacy which was the fundamental characteristic of a game. But he failed

[14] For a similar game prevalent in the Punjab, see *Calcutta Review*, March, 1923, pp. 510-13. In course of discussion regarding the diagram used for the Punjab game Das-Gupta observes, 'This type of diagram is also used in Behar' (*Ibid.*, p. 511). Most probably he had not seen this game actually played in Bihar, otherwise he would have, in all probability, mentioned that fact. It is further interesting to note that in the Punjab plains also this game is known as *Bāra-guṭi*.

to explain the real 'gameness' of it. Later on when I consulted literature regarding this game, I found Hora describing a game called *Lam Turki* played in the Teesta Valley below Darjeeling not only exactly similar to this game but also containing something more which makes it a real game.[15]

Humphries has described a game called *Kowwa Daud* played in the United Provinces[16] and very similar to the above-mentioned one described by Hora. There is an apparent difference between these two games on one hand and the Bihar game under discussion on the other hand because in the Bihar game we do not find that phase which we find in the game described by Hora. For this reason the game is called *Nāo-guṭiyā-baiṭhānekā* (placing of nine ballets). But as the placing of nine ballets itself does not really make a game, it appears to me that the man who had described it to me did not know that phase of the game described by Hora and that therefore he had named the game *Nāo-guṭiyā-baiṭhānekā*. Thus we see that a similar game is prevalent in the United Provinces, Bihar and North Bengal under different names.

8. SĀT-GHAROĀ

This game is also learnt from the said bearer. As shown in the figure there are 14 rectangular courts in the diagram. In

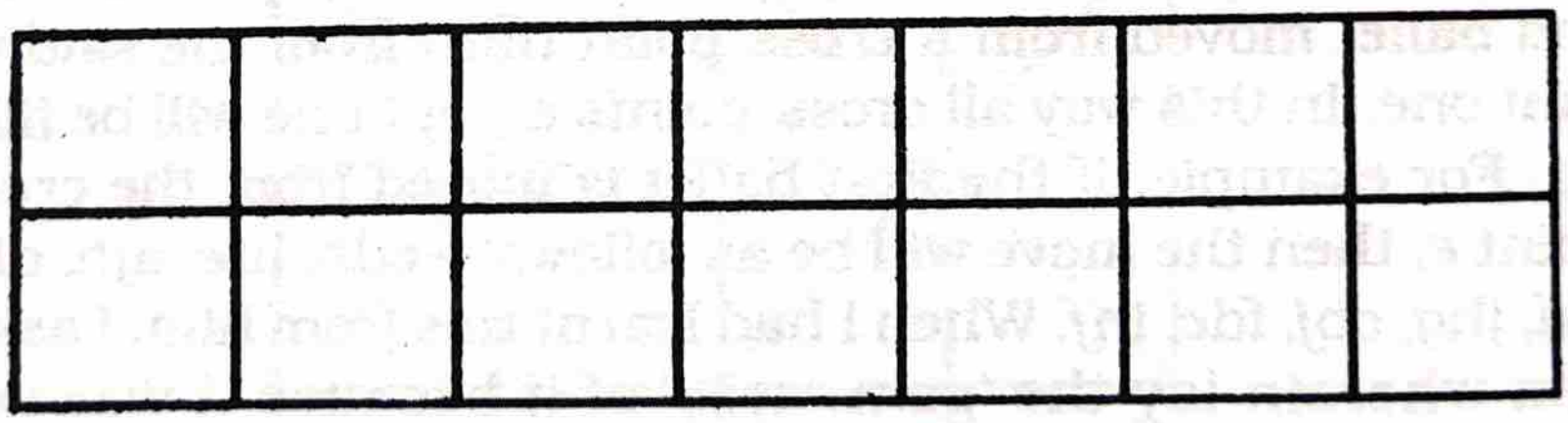

Fig. 8: Diagram for *Sāt-gharoyā*

each court four ballets are kept and two players are required for playing it. As the game was a complicated one and the time at my disposal was very short, I could not take down detailed notes regarding the rule of this game. However it clearly appears to me that this game and another described

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[15] *Journ. Proc. Asiat. Soc. Bengal*, (N.S.), Vol. XXIX, 1933, pp. 6-8, fig. 1.
[16] *Ibid.*, Vol. II, 1906, p. 126, fig. 9.

by Das-Gupta[17] are fundamentally alike. In course of describing that game Das-Gupta has shown that a similar game is prevalent among the Khasis and the Lushais and in Orissa and Madras. It is now shown that it is also prevalent in Bihar.

The study of Indian sedentary games is still in its infancy. It may be surmised that all these games are played in India from very early times. A scientific and comparative study of these games along with those played by the primitive peoples of Africa, America, and Australia and by the peoples of Europe and the Far East may throw light not only on the problem of the migration of culture but also on that of the development of similar culture in different places uninfluenced by outside factors.

FURTHER NOTE TO SĀT-GHAROYĀ BY S.L. HORA.

Among my notes there is a description of the Bihar game *Sat-Gharwa* which I have played with several Bihari farashes of the Indian Museum to study its details. The similarity of the name and of the board used for this game and the game described above as *Sāt-gharoyā* is so striking that I think the two are identical. Mr. Das Gupta did not master the rules of this game and I believe his informant had forgotten that seven pieces are placed in each court or depression and not four as stated by him. It seems desirable to complete Mr. Das Gupta's

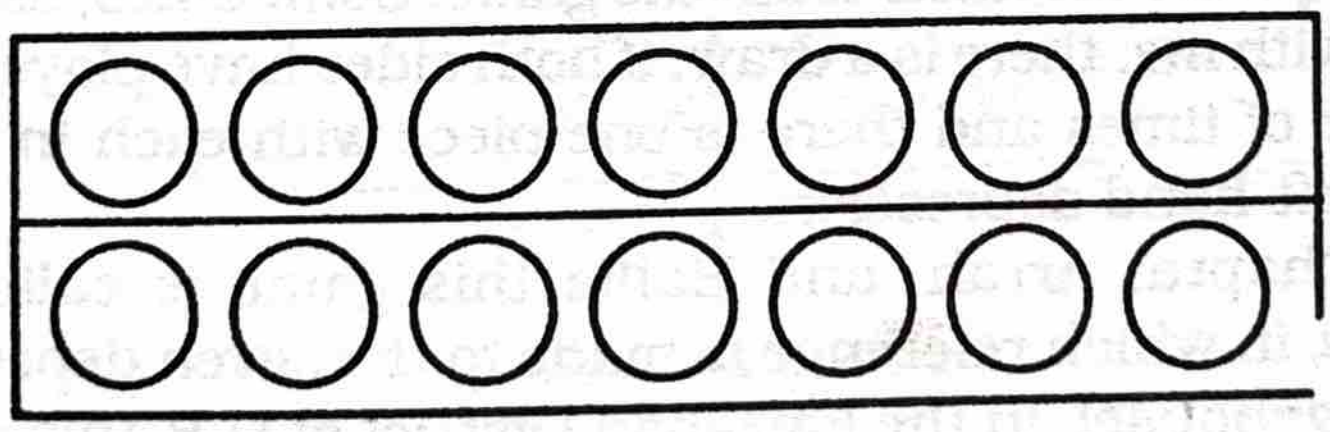

Fig. 9.

account by publishing here my notes on *Sat-Gharwa*.

For playing *Sat-Gharwa* two parallel rows of seven depressions each are made in the ground. In each depression there are seven pieces of some hard substance. The game is played by two persons who sit opposite each other. The row of depres-

[17] *Ibid.*, Vol. XIX, 1923, pp. 71-74. For a similar game called *Pachgarhwa* prevalent in the United Provinces, see *ibid.*, Vol. II, 1906, p. 125, fig. 8.

sions in front of each person is his. To begin with, one of the players picks up the pieces from one of his depressions and goes on putting one piece into each depression moving clockwise. As soon as he has dropped the seven pieces he started with, he picks up all the pieces lying in the depression immediately next to the depression where the last piece was deposited and then the previous action is repeated. He must go on repeating this till, after having deposited all the pieces that he may carry in his hand, he comes to an empty depression lying immediately next to the one where the last piece was dropped. In this case all pieces of stones lying within the depression immediately next to the vacant one will be taken out of the depression and kept aside by him. Now the other player takes his turn. It is optional for him to pick up the pieces from whichever depression of his side he chooses. Usually the pieces are counted and those likely to win are first moved. Once the choice is made, it has to be carried into effect. If the last piece happens to be deposited in a depression which is followed by two or more empty depressions, then the person loses his turn. This is an inordinately long game not requiring much skill. When few pieces are left in a few depressions on each side then real skill in moving the pieces comes in, for to win the game it is necessary that one should capture or have all the pieces removed from the depressions of his adversary. Till ultimately one person has pieces to move while the other is without any piece, the latter loses the game. Sometimes, as it happened with me, there is a draw, if both sides have played equal number of times and there is one piece with each in the extreme left-hand depression.

In Chapra, Arrah, and Ballia this game is called *Satgharwa*, in which reference is made to the seven depressions (*gharwa*=house), in the Faizabad District of U.P. this game is known as *Kothachali*, in which reference is made to the movement of the pieces along the depressions (*kotha*=depressions; and *chali*= to move).

This game is allied to several others, as has been indicated above by Mr. Das Gupta, but toward the end it is very different, as there is no value attached to the pieces captured.

A FEW TYPES OF SEDENTARY GAMES PREVALENT IN THE KHASI AND JAINTIA HILLS DISTRICT IN ASSAM

CHARU CHANDRA DAS GUPTA

The object of this short note is to describe four types of sedentary games not noticed previously by any scholar and collected by me in the Khasi and Jaintia Hills district in

Game No. 1

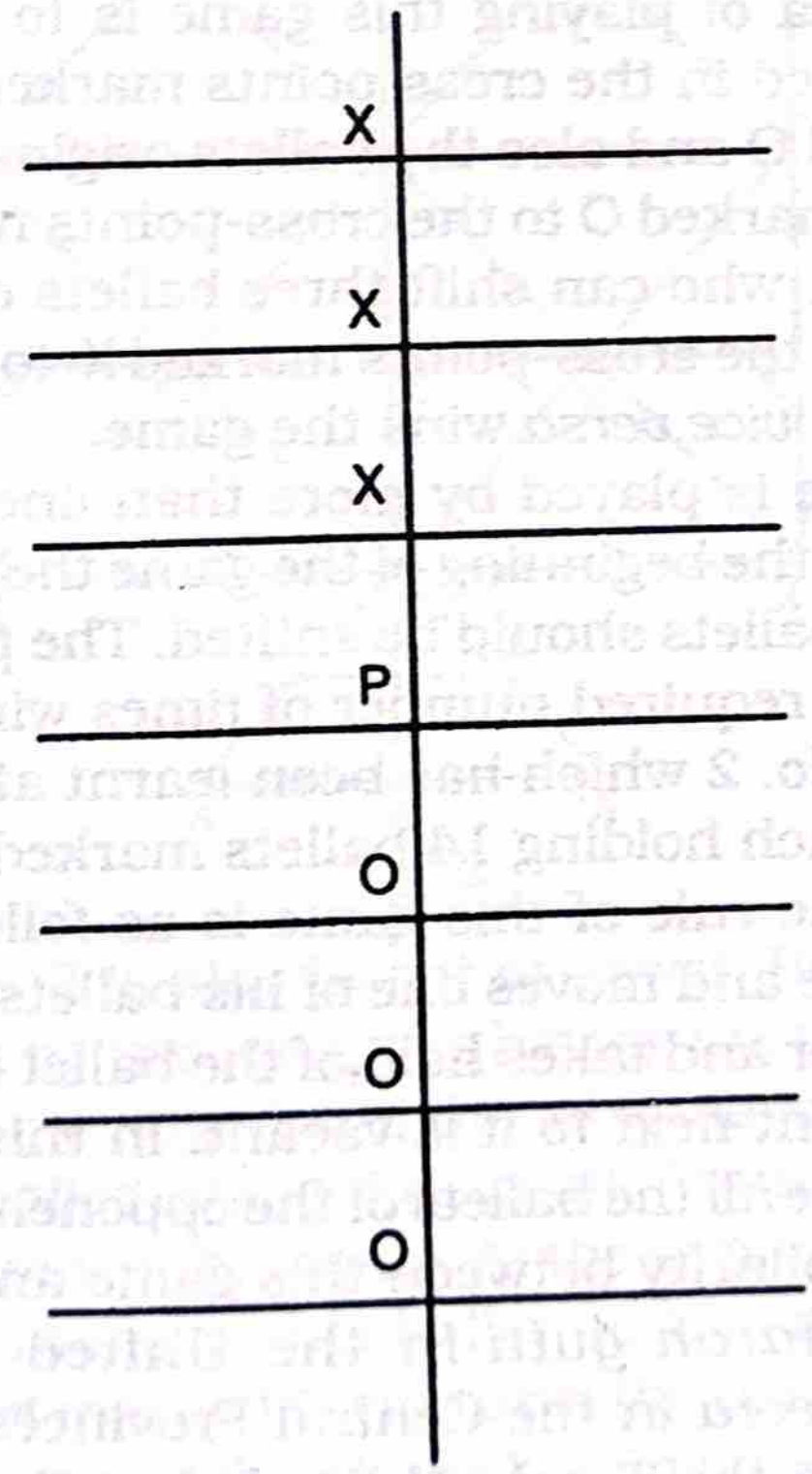

Fig. 1.

Assam. Among them the name of one cannot be traced out while the other games are known as *Pam pait, Bam blang beh khla,* and *Tule paid.*

The game No. 1 is learnt at Mawryngkneng, a place approximately sixteen miles away from Shillong. Its rule is as follows. It may be played by one man or more than that number. If one man plays it, then it forms a kind of *solitaire.* It is played by six ballets, three belonging to each type. Thus two types of ballets are required for playing it. At the beginning of the game three ballets of each type are placed in the cross-points marked X and O and the central cross-point marked P is kept vacant. Then one of the two ballets belonging to two different types and which are nearest to the central vacant cross-point marked P is shifted to this vacant cross-point. In the movement one ballet belonging to one type is shifted to a cross-point by jumping over a cross-point occupied by one ballet of another type or may occupy the next cross-point if it is vacant. Ballets of two different types are alternately shifted. The whole idea of playing this game is to shift the ballets originally placed in the cross-points marked X to the cross-points marked O and also the ballets originally placed in the cross-points marked O to the cross-points marked X . In this way the player who can shift three ballets of one type originally placed in the cross-points marked X to the cross-points marked O and *vice versa* wins the game.

If this game is played by more than one man, then it is decided before the beginning of the game the number of times for which the ballets should be snifted. The player who shifts the ballets the required number of times wins the game.

The game No. 2 which has been learnt at Jowai is played by two men, each holding 14 ballets marked X and O in his possession. The rule of this game is as follows. One player starts the game and moves one of his ballets from one cross-point to another and takes hold of the ballet of the other man if the cross-point next to it is vacant. In this way the player who can capture all the ballets of the opponent wins the game.

There is similarity between this game and another game known as *Ahtarah gutti* in the United Provinces,[1] as *Atharagutiala teora* in the Central Provinces,[2] as *Lum Pusri* or *Sipahi Kat* in the Teesta Valley below Darjeeling in Bengal,[3] as *Mughal-Pathan* in the Twenty-four Parganas, Howrah

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1 *Jour. Proc. Asiat. Soc. Bengal,* New Series, vol. II, pp. 121-22.
2 *Ibid.*, vol. XX, p. 164.
3 *Ibid.*, vol. XXIX, p. 10.

and Hooghly districts in Bengal,[4] and as *Sholaguti Mangalapata* in Vikrampur in East Bengal[5] so far as the rule of the game is concerned; but the main point of difference for which this game is considered as a new type is that the diagram used for the game under description is different from that of the game mentioned above.

Game No. 2. Pam pait.[6]

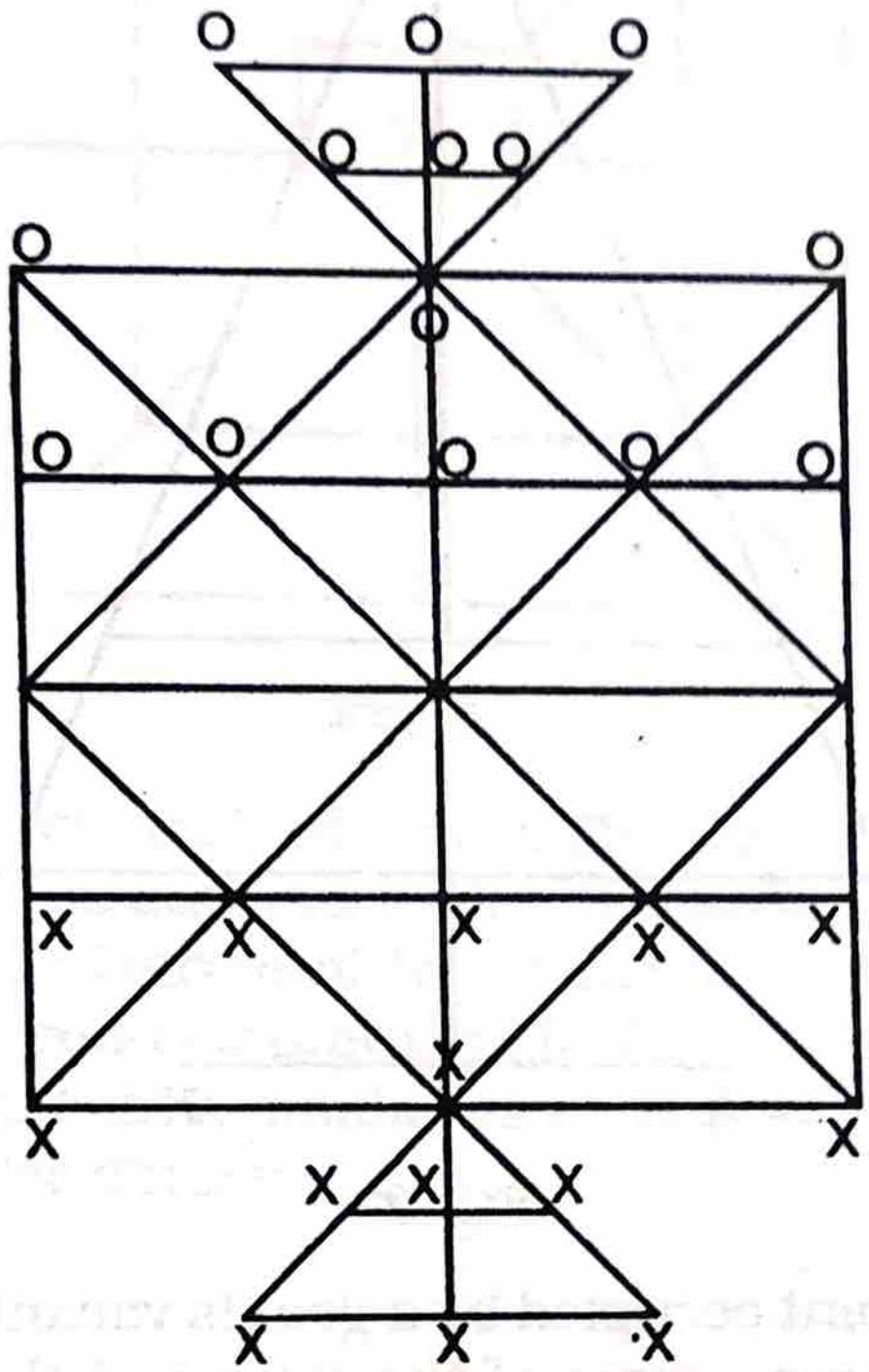

Fig. 2

The game No. 3 is also learnt at Jowai. Its rule is as follows. It is played by two men, one having the ballet marked O and called *khla* (i.e., tiger) and the other having three ballets marked X and called blang (i.e., goat). Thus altogether four ballets are required in this game. At the beginning of the game one of the players moves his ballet. In this game the player holding the ballet marked O captures the ballets marked X of the opponent player or the player holding the ballets marked X imprisons the ballet marked O. In other words, either the

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4 *Ibid.*, vol. XXIX, pp. 168-69.

5 *Sāhitya-Parishad-Patrikā*, vol. XIV, pp. 239-40.

6 The literal meaning of the term *Pam pait* is 'to cut a crowd'. IB.

tiger eats the goats or the tiger is imprisoned by the goats. In this game tiger can capture the goats if the cross-point next

Game No. 3. Bam blang beh khla.[7]

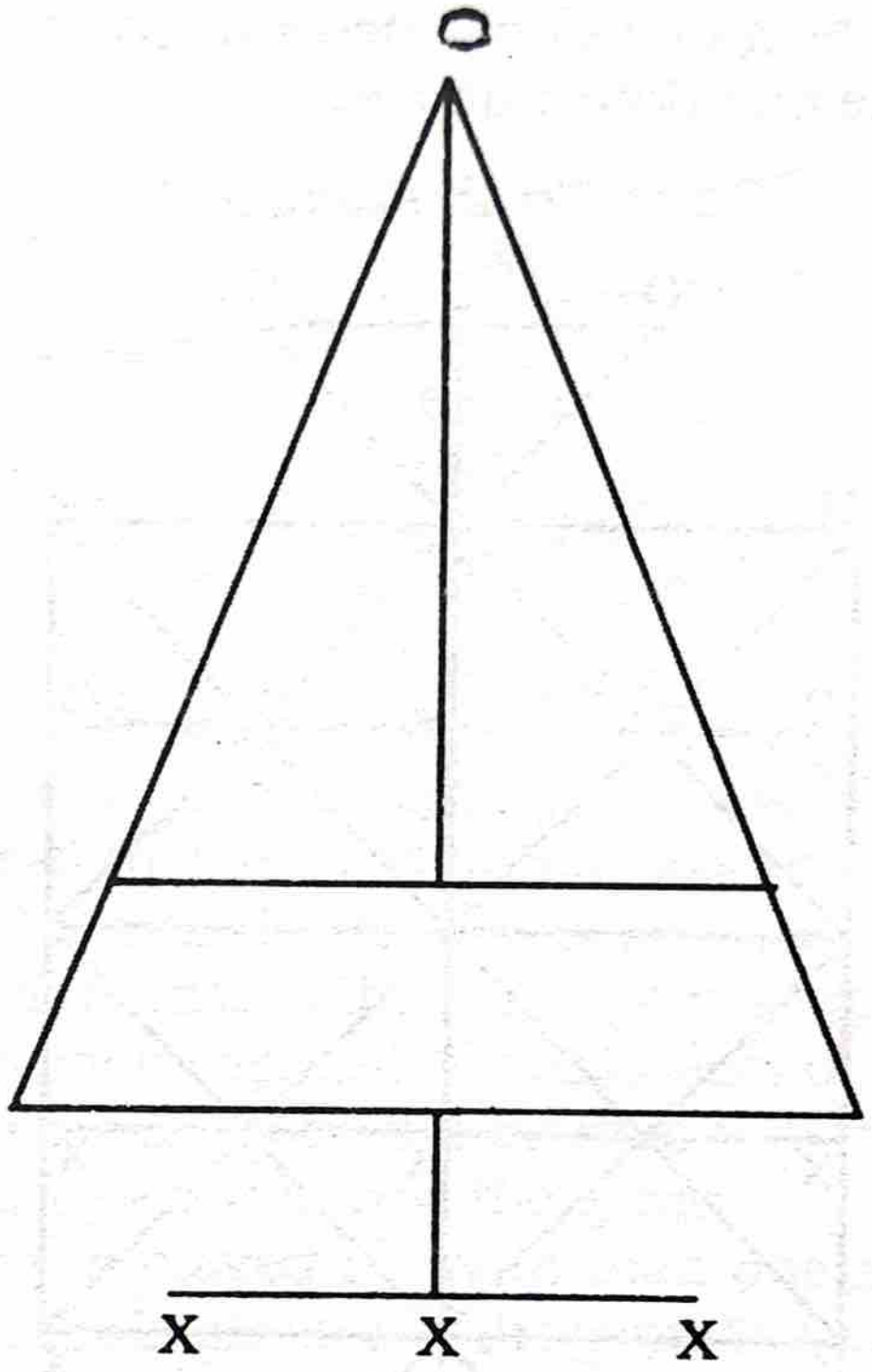

Fig. 3

to one cross-point occupied by a goat is vacant. It is a unique type of game as no game of the tiger and the goats variety which has been described up till now has a diagram like that used for this game.

The game No. 4 is played by two men, each having 12 ballets in his possession. It is also learnt at Jowai. Each player alternately puts one of his ballets on the cross-points, trying to get three pieces along one line while preventing his opponent from doing so. Whenever a player is successful in making three of his own pieces in one line, he captures one of the pieces belonging to his opponent. After all the pieces have been put on the cross-points, the players begin to move their

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[7] The term *Bam blang beh khla* literally means 'to eat goat, to drive tiger'.

pieces alternately and along the lines, having always in view

Game No. 4. Tule paid.[8]

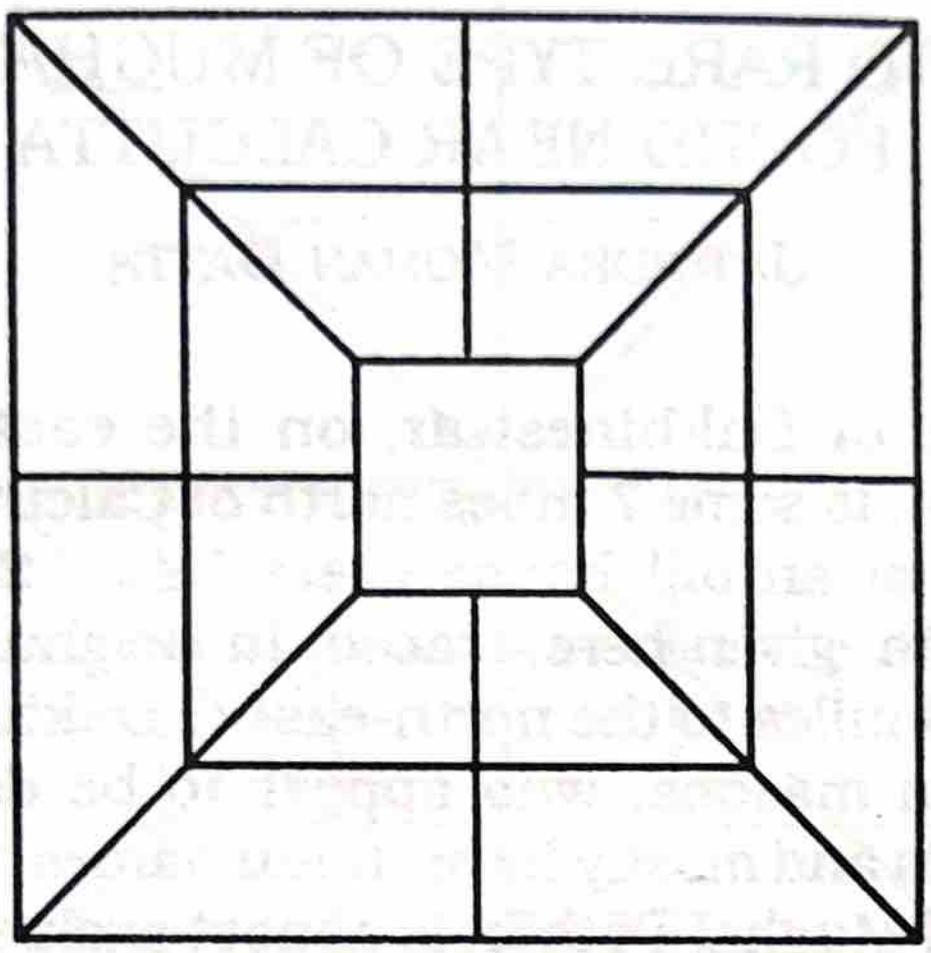

Fig. 4.

the two-fold object outlined above. The player who captures all the pieces of his adversary wins the game.

The rule and diagram of this game is similar to a game called *Bara-guti-pait-pait* prevalent in Vikrampur in East Bengal.[9] This shows that a similar game is prevalent in Bengal and Assam under different names.

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8 The term *Tule paid* means 'to put ballets along ballets'.

9 *Sāhitya-Parishad-Patrikā*, vol. XIV, pp. 241-42.

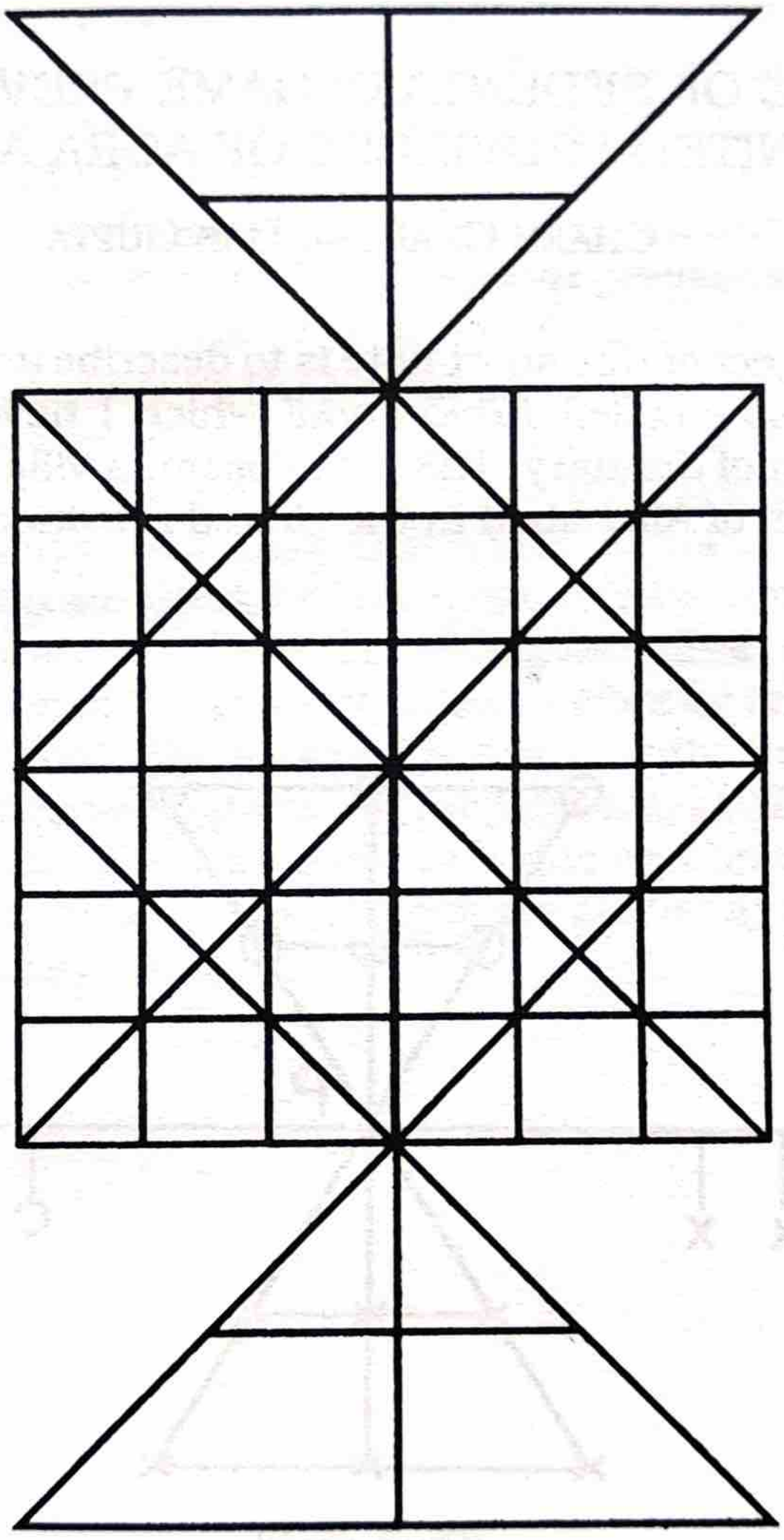
A NEW AND RARE TYPE OF MUGHAL-PĀṬHĀN FOUND NEAR CALCUTTA

JATINDRA MOHAN DATTA

The village of Dakhineswar, on the east bank of the Bhāgirathi, is some 7 miles north of Calcutta. On the cemented floor of an old house there I saw the diagram of Mughal-Pāṭhān, given here, traced. In Belghurriah, another village some 3 miles to the north-east of Dakhineswar, some Muhammadan masons, who appear to be descendants of Hindu converts and mostly have Hindu names, play the game. This variety of Mughal-Pāṭhān is almost exclusively confined to them. This diagram is used for playing the game of Mughal-Pathān. Two players are necessary for the game; and each one has 20 distinctive pieces. At the commencement each player arranges his pieces in his half of the board; and the 3 central horizontal lines are left vacant. It is played like draughts, and the usual rules of capture by jumping over a piece to an empty point opposite in a straight line apply; and two or more successive captures are permitted at a time. The standard diagram of the game of Mughal-Pāṭhān is described in *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXIX, p. 169 (1933); and it is usually played with 16 pieces each; 19 pieces each are used in a variant of the game. The present game is more difficult to play and requires greater ingenuity than the standard game with 16 pieces each, or its variant with 19 pieces each.

Mughal-Pāṭhān has also been described by B. Das-Gupta in *Quart. Journ. Vaṅgīya Śāhitya Pariṣat*, XIV, pp. 239-240, 1314 B.S., under the title of *Sola-guti Mangal Pata*, in which reference is made to 16 pieces used by each player as well as to the wars between the Mughal and the Pāṭhāns in Bengal. The standard board is used in playing several types of games, and reference may here be made to the Bornean game of *Rimoe* described by Jacobson (*Tijdsch. Ind. Taal-Landen Volkenkunde*, LVIII, pp. 8-10, 1919); the *Ahtarah Guthi* of the United Provinces—an 18-piece game described by Humphrey

(*Journ. Proc. Asiat. Soc. Bengal*, II, p. 121, 1906); *Athara gutiala Teora* of the Central Provinces—also an 18-piece game

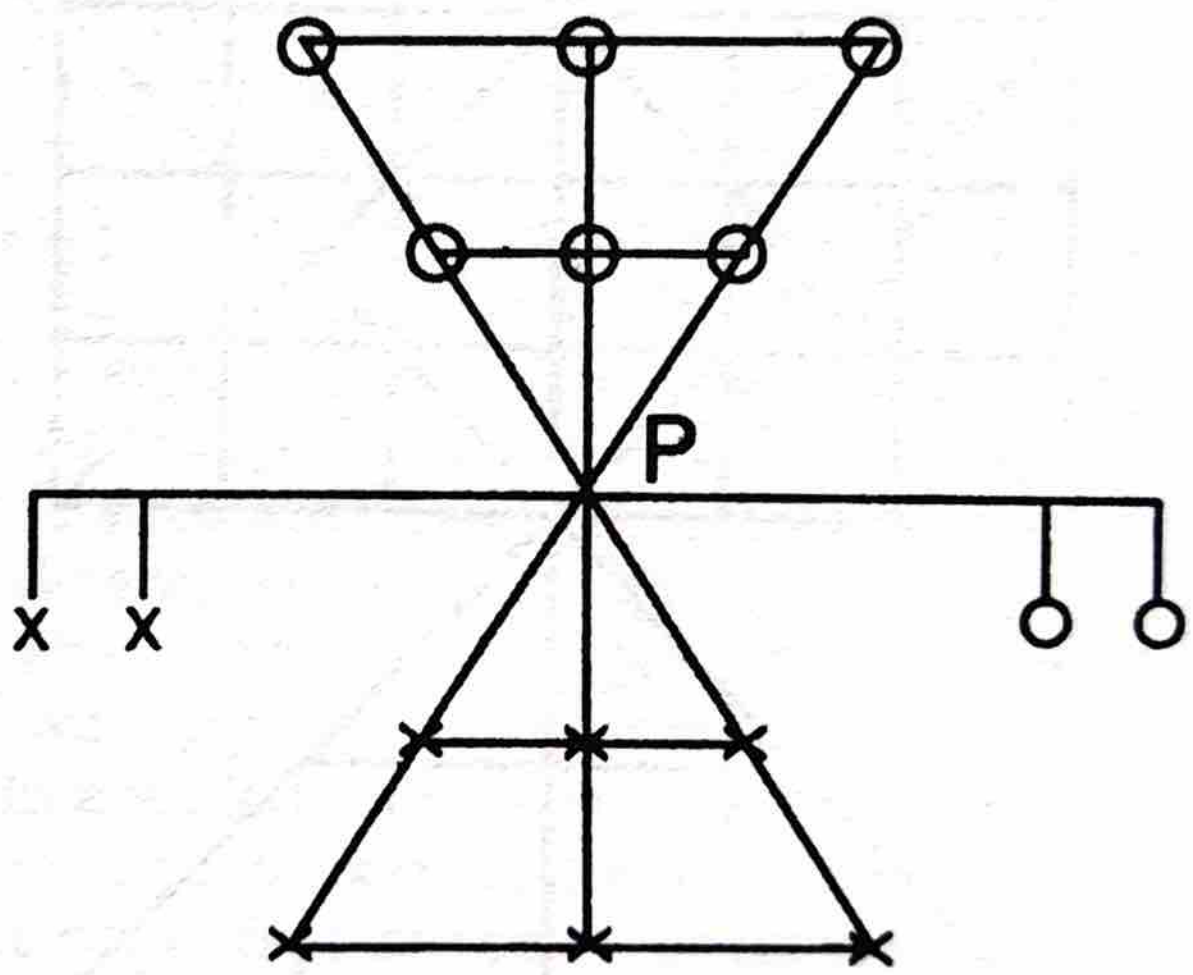


described by H.C. Das Gupta (*Journ. Proc. Asiat. Soc. Bengal*, XX, p. 166, 1924); *Lam Pusri* or *Sipahi Kat* of the Teesta Valley—an 18-piece game described by S.L. Hora (*Journ. Proc. Asiat. Soc. Bengal*, XXIX, p. 10, 1933); and a new type of *Bagh-Bandi* or Tiger-play described in the *Journ. Proc. Asiat. Soc. Bengal*, Vol. I, pp. 407-408, 1935).

A TYPE OF SEDENTARY GAME PREVALENT IN THE UNITED PROVINCES OF AGRA AND OUDH

CHARU CHANDRA DAS GUPTA

The object of this short note is to describe a type of sedentary game called *Kāuā-ḍorki*[1] which I have collected in the month of January, 1938, at Kosam, a village situated in the district of Allahabad in the United Provinces of Agra and Oudh.



Kāuā-ḍorki

The information about this game was obtained from a man called Bacchu Singhala who belongs to this village. The diagram used for this game is shown above. It is played by two men, each having eight ballets in his possession and placed on the points marked **X** and **O**; the central cross-point marked P is kept vacant at the beginning of the game. The game pro-

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[1] This term literally means 'Catching the crow'.

ceeds in the usual way of jumping over and capturing the ballet of the adversary lying on the next cross-point if there be an unoccupied cross-point just beyond the latter and in the same line. In this way the player who can take all the ballets of the opposite party wins the game.

There is some similarity between this game on one hand and some other sedentary games called *Eg̱āra-guṭi* prevalent in the Central Provinces,[2] *Lāu-kāṭā-kāṭi* prevalent in Lower Bengal,[3] *Nāo-guṭiyā* prevalent in Bihar[4] and another game prevalent at Bargarh in the United Provinces[5] so far as the diagram is concerned because the common characteristic found in all the diagrams is that two triangles meet each other at the apex. But there is one very important point in which the diagram used for this game differs from those of the games mentioned above and which, therefore, makes it a new type of sedentary game not noticed before by any scholar. This point is that this diagram has a straight line, drawn horizontally intersecting the central point marked **P**, to which two vertical lines are drawn on each side and on which two ballets in possession of each player are placed at the beginning of the game.

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[2] Journal and Proceedings of the Asiatic Society of Bengal (N.S.), Vol. XXII, 1926, p. 211, fig. 1.
[3] *Ibid.*, Vol. XXIX, 1933, p. 168, fig. 2.
[4] *Ibid.*, 3rd series, Letters, Vol. I, 1935, pp. 410-12, fig.2.
[5] *Ibid.*, (N.S.), Vol. II, 1906, p. 123, fig. 5.

CHALLIS-GHUTIA AND ITS DEGENERATE VARIANTS*

JATINDRA MOHAN DATTA

The present writer observed the following game described as *Challis-Ghutia* (the game of forty pieces) by the men playing them in the streets of Calcutta near Ultadanga. They all hail from Jaunpur in the United Provinces; and they told him that this game is also played in their home district.

The diagram of the game is shown in Fig. 1. One player occupies the points marked with X's with his 40 pieces—tiny

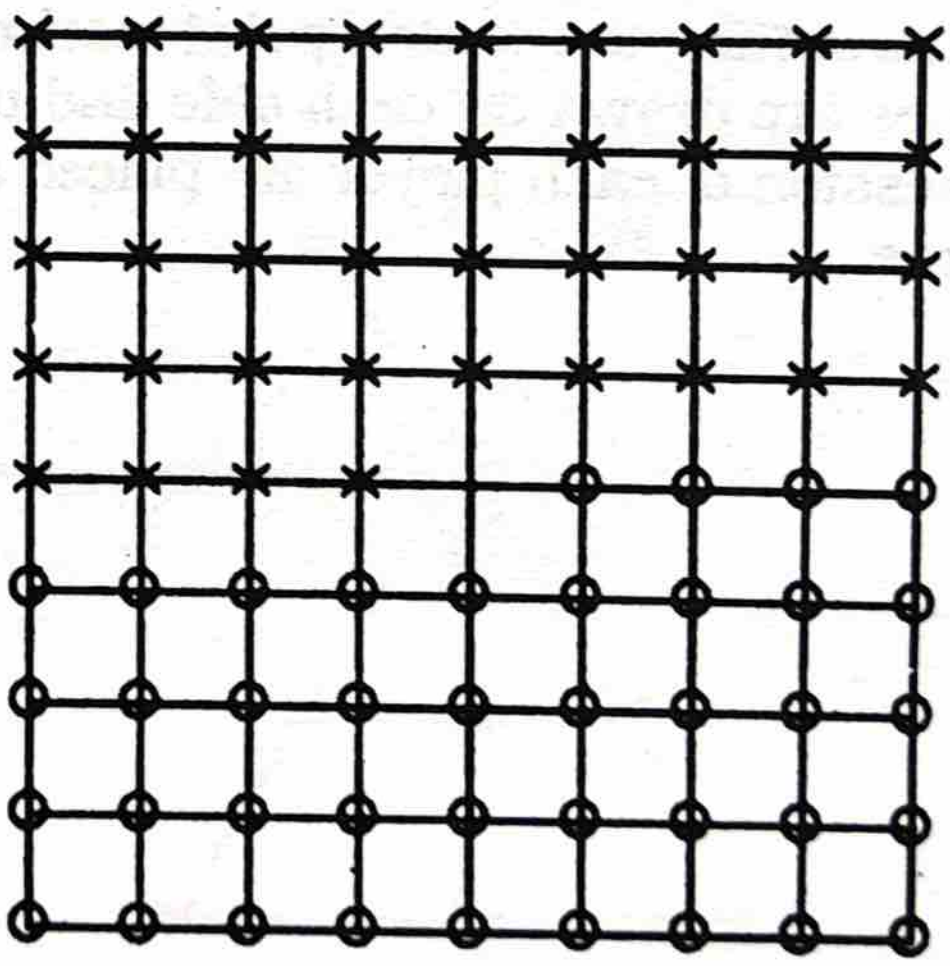

Fig. 1

bits of coal; his opponent places his 40 pieces—tiny bits of potsherd at the points enclosed by O's. The pieces move one place at a time either vertically or horizontally, if it is vacant; and they capture the opponent's pieces by jumping over the same in a straight line to a vacant point opposite. Successive captures are allowed. The winner is to capture all the pieces of his opponent.

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* Communicated by Dr. B.S. Guha.

A similar game *Ratti-chitti-Bakri* (Red-White Goats) has been described by the late Prof. Hem Chandra Das Gupta in 'Sedentary Games prevalent in the Punjab' in *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXII, (1926), p. 146.

At Tittagarh, some 13 miles north of Calcutta, the population is heterogeneous and consists mainly of mill-hands

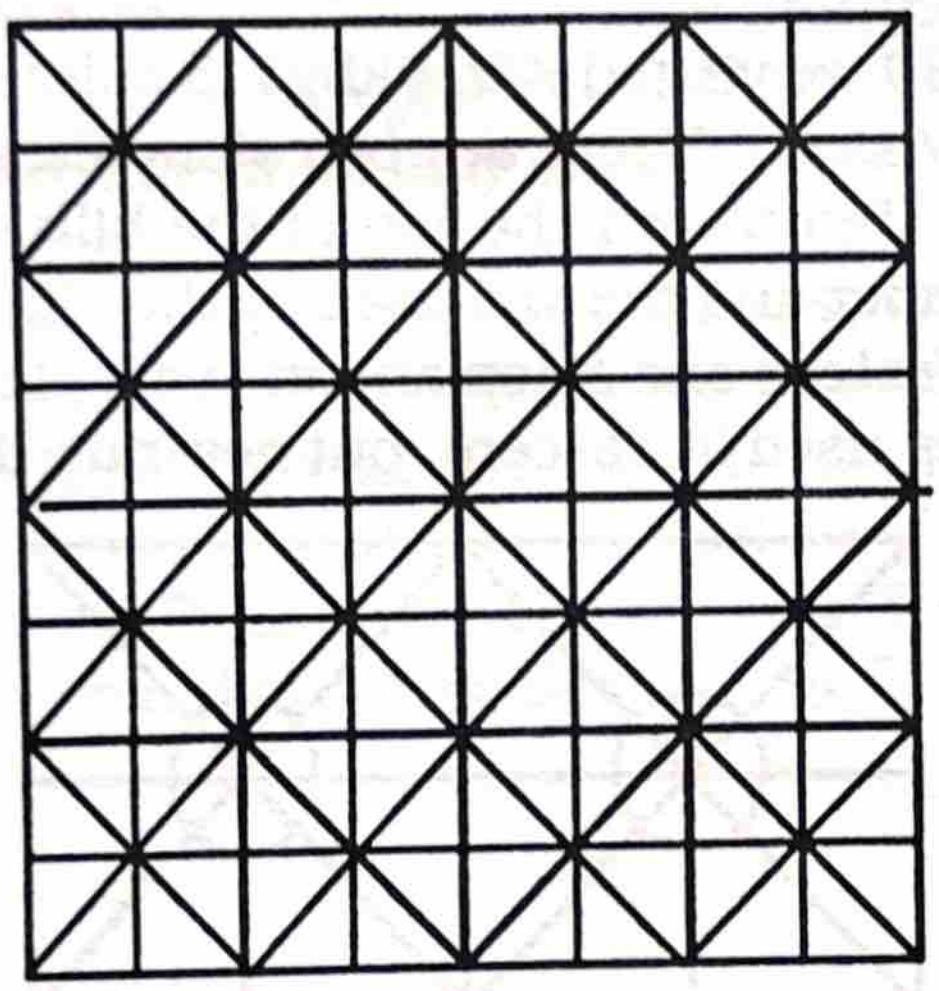


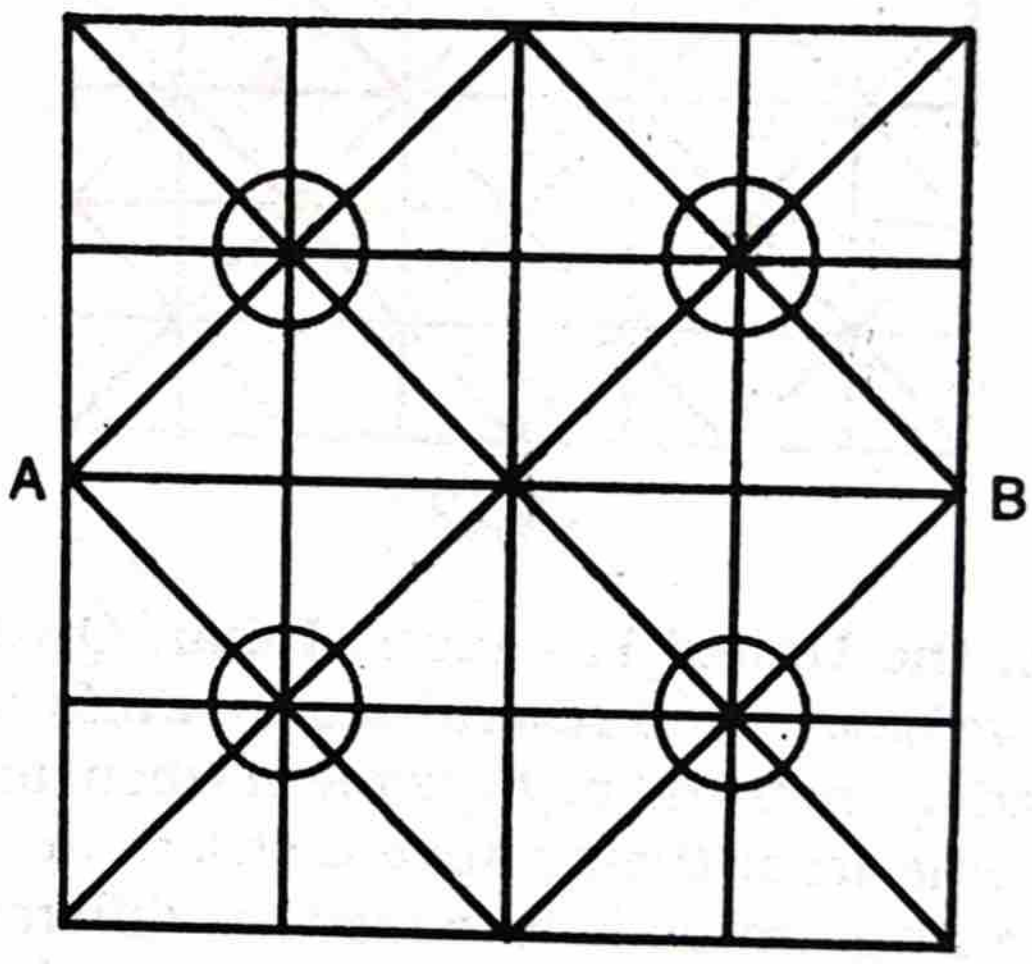
Fig. 2

coming from the United Provinces, Bihar, Orissa, and Madras. There we have found several *degenerate* forms of *Challis-Ghutia* played by men and boys, some of whom are born there and some come from their native districts in the U.P. and Madras. The diagram used is somewhat different from that shown in Fig.1. It is shown in Fig. 2. Though the game is described by the players as *Challis-Ghutia*, it is generally played with pieces far less in number than 40. Sometimes 16,18,24, and 32 pieces are used by each player; 24 being the most frequent number. The pieces are arranged along the horizontal lines; and any excess over multiples of 9 are placed along the right-hand side of the next line. The usual rules of capture and successive captures are followed.

BĀGH-CHĀL AT KĀMĀKHYĀ

JATINDRA MOHAN DATTA

In March 1939 we visited Kāmākhyā (5 miles to the west of Gauhati) in Assam. There are two stone-flagged slopes or ascents to the Temple on the top of the hills—the Eastern one much broader and the one used by the pilgrims and others; and the Western one steep and in some places very narrow, sometimes used in descent, but never used in ascent on



Tigers at A and B.
Five goats at each of the points enclosed in a circle.

account of a supposed prohibition or curse, according to which it brings ill-luck to the pilgrim ascending by it. Down the Western descent there is a stone wall, traditionally supposed to have been built by Narak Asura—now a protected monument. A few yards outside this wall, on the stone-flagging we found the following diagram chiselled; and two local Nepali boys playing the game of *Bagh-Chal*, with two tigers and 20 pieces of goats. The usual rule of capture by jumping over the piece to the next vacant point in a straight line is followed. They described the game as *Bagh-Chal*.

* Communicated by Dr. B.S. Guha

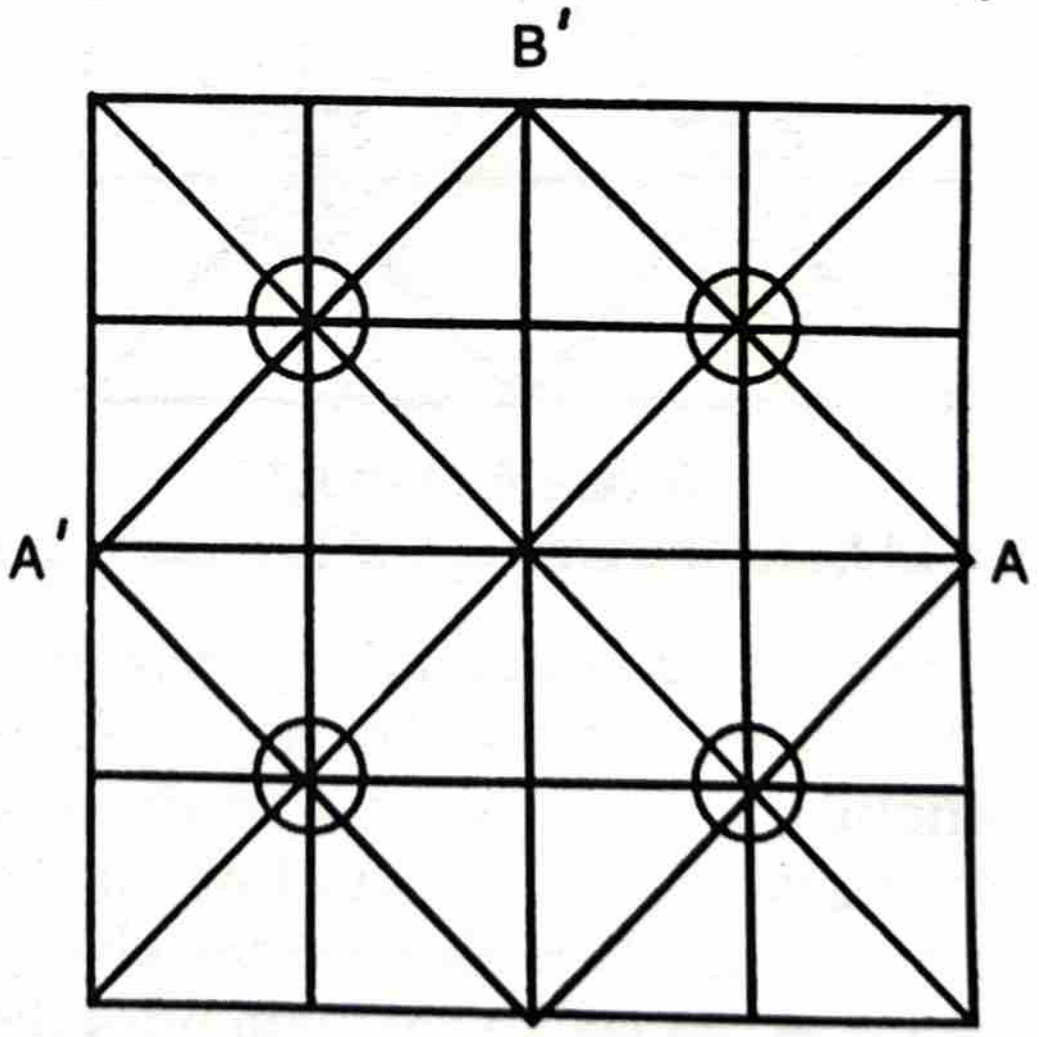
Though perhaps not strictly pertinent we would like to draw the attention of the reader to the fact that Sedentary Games were popular in the time of Emperor Akbar. Prof. Md. Sanaullah has translated *Tazkirat-ul-Ulama* from Persian. He quotes a passage from Jehangir's own writing (*Tuzuk-i-Shazade)* in which the Emperor speaks of his disinclination to read and failure of several teachers to teach him the alphabet. At last came Mulla Farrhi from Jaunpore who joined the prince in his play with *ghalula* (pellets), and within a few days turned his mind from play towards reading and writing.

Bagh-Chal is nothing but *Bagh-bandi.* The game has been described in *Journ. Proc. Asiat. Soc. Bengal,* Vol. XXIX, 1933, p. 169. See also *Journ. Proc. Asiat. Soc. Bengal,* II, 1906, pp. 123-124; *Journ. Proc. Asiat. Soc. Bengal,* XXIII, 1927, p. 297; *Quart. Journ. Bangiya Sahitya Parisad,* XIV, pp. 240-241, 1314 B.S.; *Journ. Proc. Asiat. Soc. Bengal,* Vol. XXIII, 1926, p. 145; *Journ. Proc. Asiat. Soc. Bengal,* Vol. I, 1935, pp. 407-408.

SEDENTARY GAMES—PROPOSED NOMENCLATURE OF ITS POINTS

JATINDRA MOHAN DATTA

In describing the various sedentary games, the usual method adopted is to give the diagram and indicate on it, either by marks, or lettering, or by lengthy descriptions the points occupied by the pieces of the opposing parties. The movements of the pieces are then described in a sentence or two such as 'the usual rule of capture is followed by jumping over to a vacant point', 'successive captures are allowed', etc. etc. But we think the method suggested below will not unnecessarily encumber the diagram with marks or distinguishing letters; and when several games are described on the same diagram different pictures of the same will not be required; and further—and this is most important, the movements of the several pieces can be described far more accurately.



Let us now describe the method suggested. Let the diagram be described; and the points on it be numbered 1,2,3,4.....along the horizontal lines successively, beginning

* Communicated by Dr. B.S. Guha

with the topmost left-hand corner and ending with the bottom righthand corner. All the points need not be numbered in the diagram as printed; it will be sufficient if we give only the numbers on the rim of the figure at significant points, e.g. on the extreme left-hand and righthand sides of the horizontal lines. When this method becomes familiar and well-accepted, it will not even be necessary to number the various points. The advantages of our suggested method will be apparent from a consideration of the diagram of *Bagh-Bandi*, or *Bagh-Chal*. It has been described in *Journ. Proc. Asiat. Soc. Bengal*, Vol. XXIX, (1933), p. 169.

The two tigers are placed either at points marked A, A' or at points marked B, B' . The goats are grouped at the points enclosed by circles. There are several variants of the game. In our proposed nomenclature it would be sufficient to say that the two tigers are placed either at points 3, 23 or at 11, 15. The twenty goats are grouped together, five each, at points 7,9,17 and 19. Usually the tiger captures one goat at a time by jumping over it to a vacant point opposite, such as from A' to B'; but in some variants of the game successive captures are allowed in one direction only, but not by jumping forward and backward over the same point. For example, the tiger may proceed from A' to B', then to A, and B, and back to A'; then it can proceed again to B', A, B, etc. But it is not permissible for the tiger to jump from A' to B'; and back from B' to A'. The tiger can also jump from A' to the topmost lefthand corner; and from it to B' and back to A'; but it is not permissible for it to proceed to B' first, and then from B' to the topmost lefthand corner. In other words, the tiger can move clockwise, or towards the right-hand side, but not anti-clockwise. In our proposed nomenclature it would be sufficient to say that the tiger can proceed from 11 to 3, then to 15, and 23, and back to 11. It can proceed from 11 to 1, then to 3, and back to 11; but if it goes from 11 to 3 first, it cannot go from 3 to 1. The description of the game would be far more exact and concise; and variations in the game can be described easily.

JULY

AN ORDINARY MONTHLY MEETING
OF THE ROYAL ASIATIC SOCIETY OF BENGAL WAS HELD
ON MONDAY, THE 6TH AT 5-30 P.M.

PRESENT

RAI SIR UPENDRANATH BRAHMACHARI BAHADUR, Kt.,M.A., M.D., Ph,D., F.S.M.F., F.R.A.S.B., F.N.I., Vice-President, in the Chair.

Members :

Agharkar, Dr. S. P.
Barwell, Lt. Col. N.
Bhose, Mr. J. C.
Biswas, Mr. K. P.
Bose, Mr. M. M.
Brown, Mr. Percy
Chakravarti, Prof. Chintaharan
Chatterji, Dr. S. K.
Gangoly, Mr. O. C.
Hobbs, Mr. H.
Hosain, Dr. M. H.
Majumdar, Mr. N. G.
Mullick, Mr. M. L.
Ow-Wachendorf, Baron
Rao, Mr. U. S.
Vedantatirtha, Pandit V.

Visitors :

Barwell, Mrs.
Das Gupta, Mr. C. C.
Giskra, Baroness
Ray, Mr. B. B.

The minutes of the last meeting were read and confirmed.

The following exhibits were shown and commented upon :-

A SET OF OLD ORIYA PLAYING CARDS

SUNITI KUMAR CHATTERJI

These round playing cards were in use in India, – at least in Eastern India, — before the coming of the European cards in the 18th century through the intermediacy of the Dutch. It is not known how old these round cards are, but judging from the fact that their symbolism in Hindu, they may be an early Hindu or native Indian invention, like other sedentary games like chess and *pachisi*. The number varies from 96 to 120 and more, - the present set exhibited has 96. For the hearts, spades, clubs and diamonds of European cards there

are lotuses, conchshells, clubs (the gada of Viṣṇu), circles and squares; and different gods and goddesses also figure in these cards. Playing cards of this kind were current in West Bengal and in Orissa, and the making of them lingered on in Viṣṇupur in West Bengal till recently. These cards have now become entirely obsolete, and very few people, if any, now know how to play them. The late MM. Haraprasad Sastri procured a set of Viṣṇupur cards for the Vaṅgīya Sāhitya Pariṣad and wrote an account of the manner of playing them in the Journal of that Institution.

The present set comes from Orissa. The cards are made of cloth stiffened with a ground made of gum, and the designs – mostly figures of a god and a goddess (or a human *nāyaka* and *nāyikā*), frequently in an amorous situation - are painted in brilliant colours. Pictures of Jagannāth and other Hindu gods used to be done on cloth in the same style at Puri, which pilgrims would carry home with them: now crude lithographs on paper have put an end to this form of temple art. The cards exhibited are small in size, being only about 2½ inches in diameter. Viṣṇupur cards are much bigger. They form very good specimens of Oriya painting in the traditional style, and they have a distinctive place in Indian miniature painting. Erotic scenes like those depicted in the present set are lacking in the similar type of round Viṣṇupur cards, three different sets of which I have seen. The symbols – lotuses, conchshells, clubs, etc., — are more in evidence there than human figures. The set exhibited may be fifty to eighty or even a hundred years old.

Mr. Percy Brown remarked *:*

It was interesting to compare this Orissan type of playing cards with the 'Gañjīfā Daśāvatār', a somewhat similar kind found in Hindustan. The latter were rather thicker than the Oriya Cards, as they were made of papier-maché, and stated to be played with chiefly by Indian ladies. The Gañjīfā pack consists of ten suits of twelve cards each, two of each suit being Court cards. They are based on the ten incarnations of Viṣṇu, each suit representing one of these manifestations. The two Court cards depict the form of the incarnation. While the pips on the remainder of the suit repeat some attribute symbolic of the particular incarnation depicted, for instance

in the Vāmana or dwarf incarnation the pips are represented by a lota, the Matsya by a fish, and so forth.

These cards were manufactured in several places in the Punjab and the United Provinces, the town of Khajuha in the Fatehpur district being noted. There is a complete pack of these cards mounted in correct order on glass in the Art Section of the Indian Museum.

Dr. S. P. Agharkar remarked :

The cards in question are similar to the cards known as 'Gañjiphā' in Mahārāṣṭra, which are still being used, although they are gradually being out of use. The complete set consists of 120 cards and distributed over the ten incarnations of Viṣṇu, each incarnation being represented by the king, the Vizir, and ten cards from the ace to No.10. The King is the highest and the Vizir next in each suit. The relative importance of the other cards varies in the different suits, the ace being highest and the ten lowest in the incarnations of the Matsya (fish), Kūrma (tortoise), Varāha (boar), Narahari (man-lion), and Vāman (the dwarf); and in the incarnations of Paraśurāma, Rāma, Kṛṣṇa, Buddha and Kalaṅki (or Kalkin), the ten is the highest and ace the lowest.

The game is usually played by three persons, each playing separately. Very rarely a variation, in which four persons take part, is also played. When the play is to start the cards are shuffled face downwards, the shuffling being called 'Galat' (mixing). The shuffled cards are arranged in a pile face downwards, and one of the players deals out the cards in fours after they are cut by the player on his left. After the cards are cut the person cutting turns up the card at the bottom and if it should be a king, the pile is recut. Then first four cards of each player are exposed and if they include the king of the Rāma set during the day or the king of the Kṛṣṇa set at night, it is taken out and placed on top of the cut half. The last four cards of each player are also exposed.

The cards are gathered by each player and arranged in the different suits in order of their value. The king of Rāma during the day and the king of Kṛṣṇa during the night is called the 'Surkya' (the starter), and whoever had it among his cards, throws it along with one low card of any suit called his seat

(Āsan). Both these cards are master cards, the other players throwing two cards of any colour on these.

He has next to play out together all the sequences of master cards that he may have, keeping the lowest of each as a cheque. This is called playing out 'Dukkal' ('Dukkal'—twos, which is the shortest sequence possible). After this the player plays out a low card of the suit in which he holds the Vizir but not the King. The player who has the King must play it on this card; but he may win an additional trick under certain circumstances. This player in turn plays out his 'Dukkal' and plays a card of the suit in which he has the Vizir but not the King. An effort is made to pass the game to the 3rd player, as until this happens one can only play 'straight' i.e. one can only play a low card of the suit in which he has the next highest card, certain other types of play not being permitted. If, on the other hand, he has no Vizir (which is rare), but has only Kings and cards of minor value, he has to play out all his master cards. The remaining cards in his hand are shuffled, and the player to his right calls out a card from this, which is the suit in which the game is played. This is called 'Utari', i.e. throwing down the master cards. The game is continued in this manner, each person who has the initiative playing out his master cards or going into another player's hand, so as to make some of his cards good. When all cards have been played out, the tricks each one has made are counted to find out whether one has more or less than 40, which denotes equality.

For the second deal the cards are shuffled again and dealt by the player to the right of the first dealer. Before the play commences, however, a player who has made more than the requisite number of cards in his first deal has the right to call out any cards from among those dealt to the loser, and return any cards from among his own. For this purpose the cards are kept face downwards and the winner calls out by number those he wants. They are turned upwards and mixed in the cards held by the winner and the winner returns an equal number of cards to the loser so that each player holds the same number of cards before play commences again.

The play in the second deal is similar to that in the first. At the end of the second deal it is usually found that one of the players has won very few tricks. In the third deal the

cards are dealt with as before, and cards are also taken from the loser. The result is that this player holds very low cards. The game is to prevent him from winning any trick which is called 'Kādi' (straw), signifying bankruptcy. He has, however, the chance of preventing this by winning the last trick, which is called 'Akheri' (the last). If he wins the last trick on a card played by the player on his left, all his debt is wiped out, if on a card played by the player on his right he is free of the debt due to that player only. If in the last trick the cards of all players are of the same colour, it is called 'Rangeri' (one colour).[1]

It is customary to achieve this in 3 to 4 deals, if this does not happen the game is called a draw. It is not possible to explain all the finer points of the game in this brief note, but I must mention that there are at least half a dozen Mahārāṣṭrians in Calcutta who can play the game quite well. Even in Mahārāṣṭra, however, the game is dying out and perhaps may become extinct in the next generation.

The cards are manufactured at Sawantwadi. They are made of paper which is coated by a lac dye uniformly on the back and with pictures and diagrams on the front. Whether the game was indigenous or it was borrowed from the Persians it is difficult to say. The use of the ten Avatāras for the ten suits is distinctively Hindu, as also several of the terms in use. On the other hand the term 'Gañjiphā' as well as some other terms such as 'Galat', 'Nātawāni', 'Tawānir' are non-Indian. It is quite possible that the game is originally Indian which was subsequently modified. The use of Persian and Arabic terms is probably due to the use of words from these languages having become common during the Muslim rule.

Professor *Chatterji* expressed his grateful appreciation of Dr. Agharkar's remarks. He was glad to find that the use of the Daśāvatāra cards for games was a living tradition in at least one part of India—Mahārāṣṭra. He remembers how in his childhood his maternal grandmother and other elderly ladies used to play a game with Daśāvatāra cards, which were oblong and not round, and were made of cardboard, the designs being printed by lithograph in Calcutta. These

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[1] When this happens the mutual debts of all players are cancelled and the game is a draw.

Bengali Daśāvatāra cards are no longer in vogue, and are not available any more.

In Mahārāṣṭra, as Dr. Agharkar tells us, these cards are known as (Daśāvatāra) *Gañjīfā*. The word (*Gañjīfā*) is Persian, The common word in Northern India to mean cards is *Tās* or *Tāś*. The word seems to be connected with *Tās*, *Tāsā* or *Tāś* – a kind of heavily embroidered cloth, the decorative designs on the back of European cards of the old style probably giving rise to the name.

India is reputed to be the home of the chess, of the *Pachīsī* and a number of other sedentary games. It is well worth looking up from Sanskrit literature whether there is any reference to game of cards.

Mr. *O. C. Gangoly* remarked :

These cards raise very interesting questions as to the origin of the game of cards. MM. Haraprasad Shastri contributed two articles in our *Journal* - in 1895. (JASB, LXIV, 1895, Part I, pp. 284-5 and JRASB, 1896, pp, 2-3) – in which he had boldly suggested that the Malla Kings of Viṣṇupur were the originators of this game, and that these cards may go back to about the 8th century A.D. If his suggestion can be proved, then India could claim to be the originator of this game. This class of circular cards occur in all parts of India. About 20 years ago I purchased a set of somewhat similar cards which came from the district of Bellary. I have also collected two sets from Rajputana – one of which may be as old as the 16th century.

Professor *C. Chakravarti* said :

Mm. H. P. Sastri gave a description of the game as played in Viṣṇupur with cards depicted with representations of the ten incarnations of Viṣṇu in which the Buddha occupies the fifth and not the ninth position, as is more usually the case in the Daśāvatāra list. He also referred to the fact that the plain Buddha cards were marked by lotuses. These facts, as also a local tradition that the game was invented by the Malla Rājās had led the MM. to suggest that the game was as old in India as 700-800 A.D. Before arriving at any conclusion, what is essential is the collection and study of the various types of these cards, with the varieties of games played with

them like those described by MM. H. P. Sastri and Dr. S. P. Agharkar. This is expected to throw light on the antiquity of the things in India and their connection with those of a similar nature in Europe and elsewhere. If the game is an extension of the Indian chess (as has been suggested by Singer) it may also prove to be of Indian origin. In any case, a thorough study of these materials needs be zealously undertaken before they become totally obsolete with the lapse of time. A description of the game in Sanskrit is found in a very late work, e.g., the *Gañjiphākhelanā* (Kāvyamālā, Vol, XIII, pp. 81-4) of Giridhara, Son of Śaṅkara, Grandson of Śiva, the astronomer, and author of a work on chess, fragments of which are known in MSS.

Mr. *H. Hobbs* said :

It seems to show the antiquity and wide use of playing cards in India, which are possibly even older than the loaded dice found in the ruins of Pompeii.

One can well believe that the old inhabitants had many among them who were like the modern American who complained that 'I know so little about cards that I cannot tell who is going to win unless I deal myself'.

It may be mentioned here that among the six gentlemen who took part in this discussion on 6th July 1936, on Oriya Daśāvatār cards, some of them served the Asiatic Society as responsible office-bearers and all of them were respectable members of the Society.

Since we have given the details of the meeting in the main text, duplication is avoided here by mentioning the original place and time of the discourse.

– Nirbed Ray

APPENDICES

LIST OF ABBREVIATIONS*

AB	:	Aitareya Brāhmaṇa
AIOC	:	All-India Oriental Conference
AKS	:	Avantisundarīkathāsāra
ALB	:	Adyar Library Bulletin
AP	:	Agni Purāṇa
Āpa. Dha.	:	Āpastamba-Dharmasūtra
Āpa. Gṛh.	:	Āpastamba-Gṛhyasūtra
ASIAR	:	Archaeological Survey of India Annual Report
ASINIS	:	Archaeological Survey of India New Imperial Series
ASS	:	Āpastamba-Śrautasūtra
Āśva. Gṛh.	:	Āśvalāyana-Gṛhyasūtra
AV	:	Atharvaveda
Bau. Dha.	:	Baudhāyana Dharmasūtra
BhāSS	:	Bhāradvāja Śrautasūtra
BORI	:	Bhandarkar Oriental Research Institute
BS	:	Bṛhaspatismṛti
BSS	:	Baudhāyana Śrautasūtra
Ch. Up.	:	Chāndogya Upaniṣad
DKC	:	Daśakumāracarita
ERE	:	Encyclopaedia of Religion and Ethics
HIL	:	History of Indian Literature
Hir. Gṛh.	:	Hiraṇyakeśin's Gṛhyasūtra
IHQ	:	Indian Historical Quarterly
JOR	:	Journal of Oriental Research, Madras
JRAS	:	Journal of the Royal Asiatic Society, London
KāSS	:	Kātyāyana Śrautasūtra
KB	:	Kauśītakī Brāhmaṇa
KS	:	Kāṭhaka Saṁhitā
KSS	:	Kathāsaritsāgara
KSSā.	:	Kātyāyana Smṛtisāroddhāra
LSS	:	Lāṭyāyana Śrautasūtra
M.Bh.	:	Mahābhārata
M.Bh. An Ethno. Study	:	The Mahābhārata—An Ethnological Study by G. J. Held
Mṛcch.	:	Mṛcchakaṭika
MS	:	Maitrāyaṇī Saṁhitā

Dice-Play in Sanskrit Literature, C. Panduranga Bhatta, pp. xi-xii.

MSS	:	Mānava Śrautasūtra
NS	:	Nārada Smṛti
OHRJ	:	Orissa Historical Research Journal
Paippalāda	:	Paippalāda Saṁhitā
ˇV	:	Ṛgveda
SA	:	Sāṅkhyāyana Āraṇyaka
SB	:	Śatapatha Brāhmaṇa
SBE	:	Sacred Books of the East
TB	:	Taittirīya Brāhmaṇa
TS	:	Taittirīya Saṁhitā
VIJ	:	Viśveśvarānanda Indological Journal
VPJ	:	Vidhurapaṇḍita Jātaka
VS	:	Vājasaneyī Saṁhitā
YS	:	Yājñavalkya Smṛti

GLOSSARY OF TECHNICAL TERMS*

akṣa	die used in gambling.
akṣakitava	a gambler.
akṣakuśala	one skilled in dice.
akṣaglaha	gambling.
aksatattva	the science of dice.
akṣadevana	gambling.
akṣadevin	a gambler.
akṣadyūta	gambling with dice.
akṣadhūrta	a gambler.
akṣapari	short of one die.
akṣapāta or akṣapātana	throw of dice.
akṣabhūmi	ground on which dice are cast.
akṣamālā	garland of dice.
akṣarāja	king of dice (another name for kali).
akṣavṛtta	anything that happens in gambling.
akṣaśauṇḍa	one skilled in gambling.
akṣasūkta	Gambler's Hymn.
akṣahṛdaya	the 'heart' or secret of gambling.
akṣāvāpa	superintendent of a gambling house.
akṣāvāpana	box for keeping dice.
adyūtva	anything not obtained from gambling.
adhidevana	place for gambling.
adhikalpin	a gambler.
aṣṭāpada	a board with 64 squares.
ākṣika	a gambler.
ādinavadarśa	a gambler.
āyānaya	a safety square on the dice-board.
āskanda	a gambler.
iriṇa	a place for throwing dice.
kaparda or kapardikā	cowrie shell.
kali	name of a die or the side of a die marked with one dot. Indicates a losing throw.
kitava	a gambler.
kūṭadevin	a fraudulent player.
kūṭākṣa	a false or fake die.
kūṭākṣadevin	one who plays with fake dice.
kṛta	name of a die or a side of a die marked with four dots; a lucky throw.
gardabhī	an unlucky throw.
graha (also grābha)	a throw of dice.
glaha	game of dice; a stake.
tretā	name of a die or the side of a die marked with 3 dots.

* *Dice-Play in Sanskrit Literature*, C. Panduranga Bhatta, pp. 143-145.

durodarāḥ	a dice player; a heap of dice.
durodoram	gambling.
devana	gambling.
dyūta	gambling.
dyūtakara	a gambler.
dyūtakāraka	the keeper of a gambling house.
dyūtakiṅkarī	a female slave won at dice-play.
dyūtakrīḍā	play with dice.
dyūtadharma	rule(s) of gambling.
dyūtapalāyita	one who has run away from the game of dice.
dyūtapūṃimā	the full-moon day of Āśvina spent in games of chance, to honour goddess Lakṣmī.
dyūtapratipad	the first day of the bright fortnight in the month of Kārttika, celebrated with gambling.
dyūtaphalaka	gambling board.
dyūtabhūmi	gambling place (see also akṣabhūmi).
dyūtamaṇḍala or dyūtamaṇḍalī	a circle of gamblers.
dyūtavṛtt	a professional gambler; keeper of a gambling house.
dyūtavyavahāra	judicial proceedings regarding gambling.
dyūtaśālā or dyūtasabhā	a gambling house.
dyūtādhyakṣa	superintendent of gambling.
dyūtābhiyoga	suit regarding gambling.
dvāpara	a die or the side of a die marked with 2 dots.
dhūrtakitava	a gambler; a winning gambler.
dhūrtamaṇḍala	assembly of gamesters.
nardita	a kind of dice; a throw of dice.
pañcakadyūta	name of a game played with five dice.
paṇa	a wager.
paṇakrīḍā	gambling.
pāśa or pāśaka	a die.
pāśakrīḍā	dice play.
pāśakapīṭha	a gambling table.
bradhna	a die.
vibhītaka	nuts of the vibhītaka tree (Terminalia Belerica)used as dice.
sabhā	gambling house.
sabhāvin	keeper of a gambling house.
sabhāsthāṇu	a dicer.
sabhika	keeper of a gambling house.
sādhudevin	one who is skilled at dice.
śalākā	a die.
śāra or śārī	a piece used on draught.
śārīphalaka	a board for playing draught.
śvaghnin	a gambler.

APPENDIX ONE

ANALYSIS OF THE GAME OF DICE*

C. PANDURANGA BHATTA

5.1 NAMES FOR THE GAME OF DICE AND THE WORDS USED TO DENOTE GAMBLERS

The game of dice was called *akṣakrīḍā* or *vibhītaka* in the *Ṛgveda*. The word *dyūta* is used in the *sūtra* literature but it is left undefined there.[1] Gautama in his *Dharmasūtra* includes gambling under acts forbidden to a *Brahmacārin* and he has used the word *dyūta* in this connection.[2] The commentator Haradatta in his *Mitākṣarā* refers to two kinds of gambling, viz., *prāṇidyūta* and *akṣakrīḍā*. He says:

dyūtaṁ dvividhaṁ aprāṇiprāṇidyūta bhedāt/
Prāṇidyūtaṁ meṣayuddhādi/
aprāṇidyūtaṁ akṣakrīḍādi/[3]

The *Manusmṛti* defines *dyūta* as *aprāṇibhiryatkriyate talloke dyūtamucyate./*[4] It is thus clear that according to Manu when inanimate things are used for staking money on them, the game is called *dyūta* (gambling). The *Prāṇidyūta* referred to in the commentary *Mitākṣarā* on *Gautama Dharmasūtra* (I-2-23) is called *samāhvaya* by Manu. When animate beings are used for the purpose of gambling, that is to be called *samāhvaya* (betting):

Prāṃbhiḥ kriyate yastu sa vigyeyaḥ samāhvayaḥ/[5]

The *Nāradasmṛti* also defines *dyūta* which is called *devana*, in a similar way. *Dyūta* is defined here as that sport which is carried on with inanimate objects such as dice, pieces of leather, ivory and the like and in which a stake is involved.

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* Since this article is the reproduction of Chapter 5 from C. Panduranga Bhatta's thesis *"Dice-play in Sanskrit Literature (A Study)"* published by Amar Prakashan, New Delhi, 1985, sub-headings are kept unchanged and accordingly numbered as 5.1, 5.2 & so on.

The sport carried on with living beings such as cocks, pigeons, buffaloes and rams is called *samāhvaya.*

akṣabrudhnaśalākādyaiḥ devanaṁ jihnakāritam
paṇakrīḍāvayobhiśya padaṁ dyūtasamāhvayam//[6]

The word *durodara* used in neuter gender also denotes gambling and this has been explained as *duṣṭaṁ āsamantāt udaraṁ yasya tat* ("That which has an ignominous stomach").[7]

Words used to Denote Gamblers

There are many words which designate gamblers. In the Vedic period the most popular word used to denote a gambler was *kitava.*[8] In the *Saṁhitās* of the *Yajurveda* there are different names used to denote different types of gamblers.[9] They are *Ādinavadarśa, Kalpin, Adhikalpin* and *Sabhāsthāṇu.* They are explained by Mahīdhara in his commentary as follows:

ādinavadarśaṁ ādinavo daṣastaṁ paśyati tathābhūtam
kalpinaṁ kalpakam dhikalpinam adhikalpanākartāram/[10]

In the *Taittirīya Brāhmana* some other names such as *Sabhāvin* and *Bahissada* are given.[11] The commentator Sāyaṇa explains some of these terms as follows :

kitavaṁ dyūtakuśalam, sabhāvinaṁ dyūtasabhāyā adhiṣṭhātāram,
ādinavadarśaṁ maryādāyāṁ devanasya draṣṭāraṁ parīkṣakam/
bahiḥsadaṁ bahiḥ sadanaśīlaṁ svayamadīvyantam/
sabhāsthāṇum adevanakāleapi sabhāṁ yo na muñcati
soayaṁ stambhasamānatvātsabhāsthāṇuḥ/[12]

Another word used in the *Ṛgveda* and the *Atharvaveda* which denotes a professional gambler is *Śvaghnin.*[13] As seen earlier in the ritual called *śvagrahaprāyaścitta* a gambler helps to cure a boy attacked by dog-demon. So the gambler is one who destroys an evil spirit called *śva* and probably because of this he would have been called *śvaghnin.* The word *Durodara,* when used in masculine gender, denotes gambler. *Dyūtakāraḥ* is also used to denote a gambler. According to Pāṇini *ākṣika* and *śalākika* refer to a gambler.[14]

5.2 THE TYPE OF DICE USED FOR THE GAME

The popular term for dice in Sanskrit is *akṣa*. Other terms used to designate the dice are *vibhītaka*, *pāśaka*, *śalākā*, *bradhna*, etc.

As we have seen Yāska derives the word *akṣa* from the root *aś*, 'to reach'. The word literally means 'possessing eyes' and most probably this refers to the eye-like signs sometimes found on the dice. The actual Indo-European prototype is "oq"—'to see'. It is similar to the German word "o'sse"—'eyes'.

Dice are called *vibhītakas* as they were got from the *vibhītaka* trees which grew on mountain slopes. In the Vedas the *vibhītaka* nuts are described as brown *(babhru)* in colour.[15] The *vibhītaka* nuts are round in shape with five slightly flattened sides. The size of the *vibhītaka* nut is not very big. One of the *Jātakas* refers to a gambler, playing false, swallowing a die.

Besides the natural fruit, imitations of wood and even gold seem to have been in use. Sāyaṇācārya remarks that the dice used in games consisted either of gold cowries (shells) or of gold dice shaped like *vibhītaka* nuts.

akṣāḥ kapardakāḥ suvaṃanirmitaḥ/
vibhītakaphalāni sauvaṃāni ityeke/[16]

Prof. Lüders is of the opinion that the golden dice were used only in the ritual playing of the game.[17] But this view is not supported by Prof. A.B.Keith who says that the golden dice were also used in the secular game on the basis of a reference found in the *Śāṅkhāyana Āraṇyaka*.[18] In the ritual game at the *Agnyādheya* and the *Rājasūya* ceremonies dice of gold, silver, ivory, and the *vibhītaka* nuts were used on certain occasions, states the *Baudhāyana Śrauta Sūtra*.

sauvaṃāḥ syuriti baudhāyanaḥ,
rajata iti śālikīḥ;
nāgadantā ityaupamanyavaḥ;
vaibhītakā ityaupavamanyavīputraḥ/[19]

The *Mahābhārata* also speaks of several types, i.e., those made of gold, ivory and of different colours like black and red.[20]

In the *Harivaṁśa* also we have reference to black and red coloured dice.

kṛṣṇākṣāṁllohitākṣāṁśya deśe asminstvadhipāṅsuke/[21]

Golden dice are referred to in some of the *Jātakas* of the Buddhists.[22] The dice-set which Vasantasenā possessed was bejewelled according to the *Mṛcchakaṭika*.[23]

The dice discovered in the Indus Valley sites are made of stones, ivory and well-baked clay.[24] Excavations at Taxila have disclosed a number of dice made of ivory, bone, slate and terracotta.[25]

Besides the *vibhītaka* we have references in the Sanskrit literature to the *pāśaka, śalākā. bradhna* and other types of dice.

A reference is made to *pāśa* in some *Jātaka* stories.[26] The word *Pāśaka* also occurs in the *Virāṭaparvan* of the *Mahābhārata*.[27] But many scholars consider this passage to be an interpolation. The *Nāradasmṛti* refers to the *śalākā* and *bradhna*.[28] The term *śalākā* is explained in the commentary as a four sided bar made of ivory.[29] The term *bradhna* is explained as a leather-strap.[30] The word ādi (etc.) used by Nārada in this connection is taken to designate other objects used in the game of dice.

kākinyo vardhakāścaiva śalākā śopa aiva ca
akṣāḥ sabījāḥ kurukā dyūtopakaranāni ṣaṭ/

They are explained in the *Keśavavaijayantī* of Nandapaṇḍita, a commentary on the *Viṣṇusmṛti*.

kākinyaḥ kapardikāḥ/śopah caturangaṁ
kāṣṭhādinirmitaṁ sainyam/sabījāḥ guptabījāḥ kurukā
muṣṭayaḥ/[31]

Both the words *akṣa* and *śalākā* are mentioned by Pāṇini.[32] Kauṭilya also refers to *śalākā* in his *Arthaśāstra*.[33]

It is thus clear that many kinds of dice called *vibhītaka, akṣa, śalākā, pāśaka* were used in the game. The word *vibhītaka* refers only to the nuts of *vibhītaka* tree whereas the word *akṣa* commonly refers to *akṣa, śalākā, pāśaka*, etc. The words *pāśaka* and *śalākā* would have referred to oblong pieces made of gold, ivory, etc. We do not have definite proof to show that the oblong ivory pieces or cubical dice were used during the Vedic age. It seems that only *vibhītaka* nuts were used during that period. The *vibhītaka* nuts used in the game did not bear any marks. The cubical dice and the oblong pieces used to be marked on the sides with points or numbers.

Most of the dice found in the Indus Valley are cubical and

they vary in their size from 1.2 by 1.2 by 1.2 inches to 1.5 by 1.5 by 1.5 inches. One rectangular die measures 1.6 by 1.4 by 1.1 inches. The sides of these cubical dice are numbered with small ring-marks. The numbers run from one to six and are so arranged that one is opposite two, three opposite four and five opposite six.[34] This numbering differs from the modern method of marking according to which the sum of each pair of opposite sides is seven. Accordingly in the modern dice the numbers are so arranged that one is opposite six, two opposite five, and three opposite four. The tabular dice are marked with the numbers one, two, and three on three sides and have the remaining side ornamented with longitudinal lines.[35]

The dice found at Brāhmanābad are numbered as the present-day dice. Here the sum of each pair of opposite sides is seven.[36] There are many small square pieces which are marked on the top in Plate XLV (Fig.9) of the *stūpa* of Bharhut named "Chitu-pāda-śilā".[37]

The oblong-shaped dice discovered at Taxila have the numbers 1,2,3, and 4 on all four sides by way of concentric circles of simple dots.[38] The dice found at Nāgārjunakoṇḍa have numbers incised on them in accordance with those known in ancient India. About 20 dice discovered here bear concentric circles while the others are marked out with a simple dot within a circle.[39]

Thus it is clear that the Vedic people used to play the game using *vibhītaka* nuts as dice, for which reason the Veda somtimes calls the game itself *vibhītaka*. In the developed form of the game both cubical and rectangular dice came to be used. The rectangular dice were generally called *aksas* but precisely as *pāśakas* and *śalākās*.

5.3 USE OF BOARDS

It seems that boards were used in dice-play only in the later period. The Sanskrit words for the boards are *aṣṭāpada, daśapada, dyūtaphalaka* and *ākarṣaphalaka*.

The words *iriṇa* and *adhidevana* used in the *Vedas* and *Brāhmaṇas* refer to places on which the dice are thrown.[40] The word *irīṇa* is used in the *Saṁhitās* and *Brāhmaṇas* in the sense of a cleft in the ground, usually natural (*svakṛta*).[41] At one place the hole is referred to as made by water (*apākṛtam*).[42] Prof. Pischel says that the dicing board must

have been called *iriṇa* because it contained holes into which the dice had to be thrown.[43] Prof. Lüders does not agree with this assumption because in his opinion the dice were merely thrown on a space dug out, which could be called *iriṇa*, as being a hole in the ground.[44] Prof. Lüders's suggestion is supported by the commentary of Durga on Yāska's *Nirukta* in which he says: *iriṇe nirgataṃe āsphurakasthāne.*[45] Sāyaṇa also explains the word *iriṇa* similarly in his commentary on the *Ṛgveda*. He says: *iriṇe āsphāre.*[46]

Nīlakaṇṭha in his commentry on the *Mahābhārata* explains the word *āsphura* as follows:

āsphuramakṣavinyāsapātanādisthānaṁ/[47]

Yāska explains the word *iriṇa* as follows:

iriṇaṁ nirṇaṁ-mṇāterapāṃaṁ bhavati/
aparatā asmādoṣadhaya iti vā/[48]

It refers to a place from which herbs have been removed.

Another word used in the *Ṛgveda* in connection with dicing is *devana.*[49] This word like *iriṇa* denotes the place on which the dice are thrown. *Devana* is also called *adhidevana* in some passages.[50] Durga in his commentary on the *Nirukta* also explains the word *devana* in the same manner. He says: *devane āstāre.*[51]

We have references to *adhidevana* in the *sūtra* literature also. Āpastamba in his *Śrauta Sūtra* remarks that dice are to be thrown on the *adhidevana* (depression) made for the purpose.

adhidevanamuddhatyāvokṣyāksānnivapet/
atha sabhāyā madhye-
adhidevanamuddhatyāvokṣyākṣānnyupya/[52]

Baudhāyana says:

dakṣiṇato-adhidevanaṁ karoti/[53]

The *Bhāradvāja Śrauta Sūtra* has the following passage:

sabhyāvasaśvayormadhye-adhidevanamuddhatya
uttareṇāvokṣyādhidevanāya sanstṇāti/[54]

In the *Āpastamba Dharmasūtra*, we have the following line:

sabhāyā madhye-adhidevanamūddhatyāvokṣya...[55]

The commentator Haradatta explains the word *abhidevana* as a place on which gamblers play the game with dice.

yasyopari kitavāḥ akṣaiḥ dīvyanti
tatsthānamadhidevanam/[56]

Thus the references found in the *Vedas*, *Brāhmaṇas* and *Sūtra* literature make it clear that no board was used to throw the dice on. A depression made in the ground alone served the purpose.

One of the earliest references to the board is in the *Brahmagālasutta* of the *Dīghanikāya*.[57] Here both *aṣṭāpada*[58] and *daśapada* are referred to. It is stated here that some sages and Brāhmaṇas spend their time in unnecessary pursuits such as the *aṭhāpada* and *daśapada*. The Sanskrit equivalents of these are *aṣṭāpada* and *daśapada* respectively. Buddhaghoṣa in his commentary *Sumaṅgalavilāsinī* on the *Dīghanikāya* explains the word *aṣṭāpada* as a game on boards with 8 rows having 8 squares in each row.[59] In the *Rāmāyaṇa* while describing the town planning of Ayodhyā, Vālmīki says that the capital's layout was in the form of an *aṣṭāpada*.

citrāmaṣṭāpadākārāṁ varanārigaṇāyutām/
sarvaratnasamākiṇṇāṁ vimānagṛhaśobhitām//[60]

The commentator Tilaka explains *aṣṭāpada* as *dyūtaphalaka* or chess-board.[61] We have a reference to the word *aśṭāpada* in the *Harivaṁśā*. Balarāma is said to have hit Rukmin with the board (aṣṭāpada) when their play ended in a quarrel.

jaghānāṣṭāpadenaiva ptamathya yadunandanaḥ/
aṣṭāpadena balavānrājā vijradharopamaḥ/[62]

We have references to this fact in the *Viṣṇupurāṇa* and the *Brahmapurāṇa*.[63] There is no reference to this word in the Vedic literature. *Daśapada*, as the name itself denotes, is a board with 10 rows having 10 squares in each row. *Vidhurapaṇḍita Jātaka* refers to a dicing board made of silver.[64] Vātsyāyana refers to *dyūta-phalaka* and *ākarṣa-phalaka*.[65]

In the Indus Valley, a portion of triple-rowed gaming diagram on brick was recovered at a Harappan site.[66] The bas-relief on the Bharhut rails depicting a scene of gambling contains a board which has six times six squares.[67] Traces of game-boards on some of the basement slabs and ghat steps are found both in religious and secular buildings at Nāgārjunakoṇḍa in Andhra Pradesh. Many game-boards have

also been discovered at bathing and burning-ghat areas, and at a Maṇḍapa connected to a four-spoked *stūpa*. Most of the game-boards discovered here consist of 8 rows having 8 squares in each row. Evidently this is meant for playing *aṭṭapada* (*aṣṭapada*). Other boards incised on the flooring

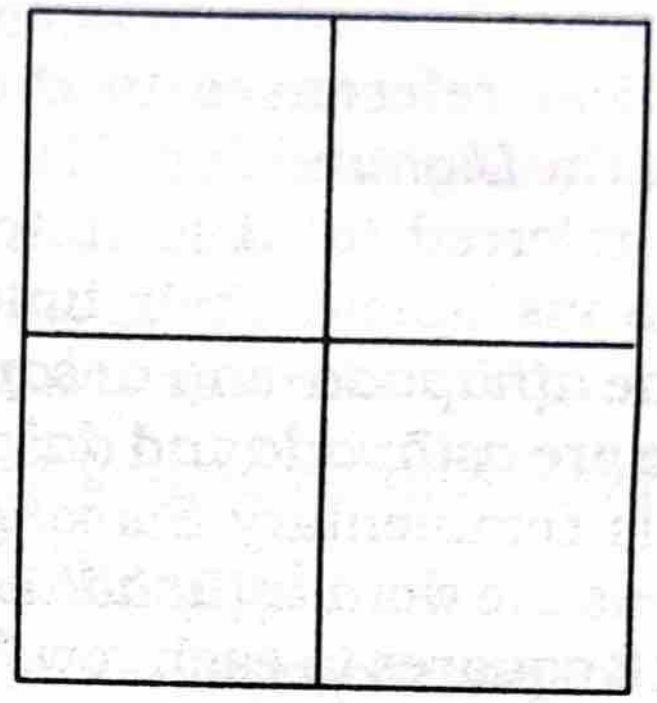

Figure 1

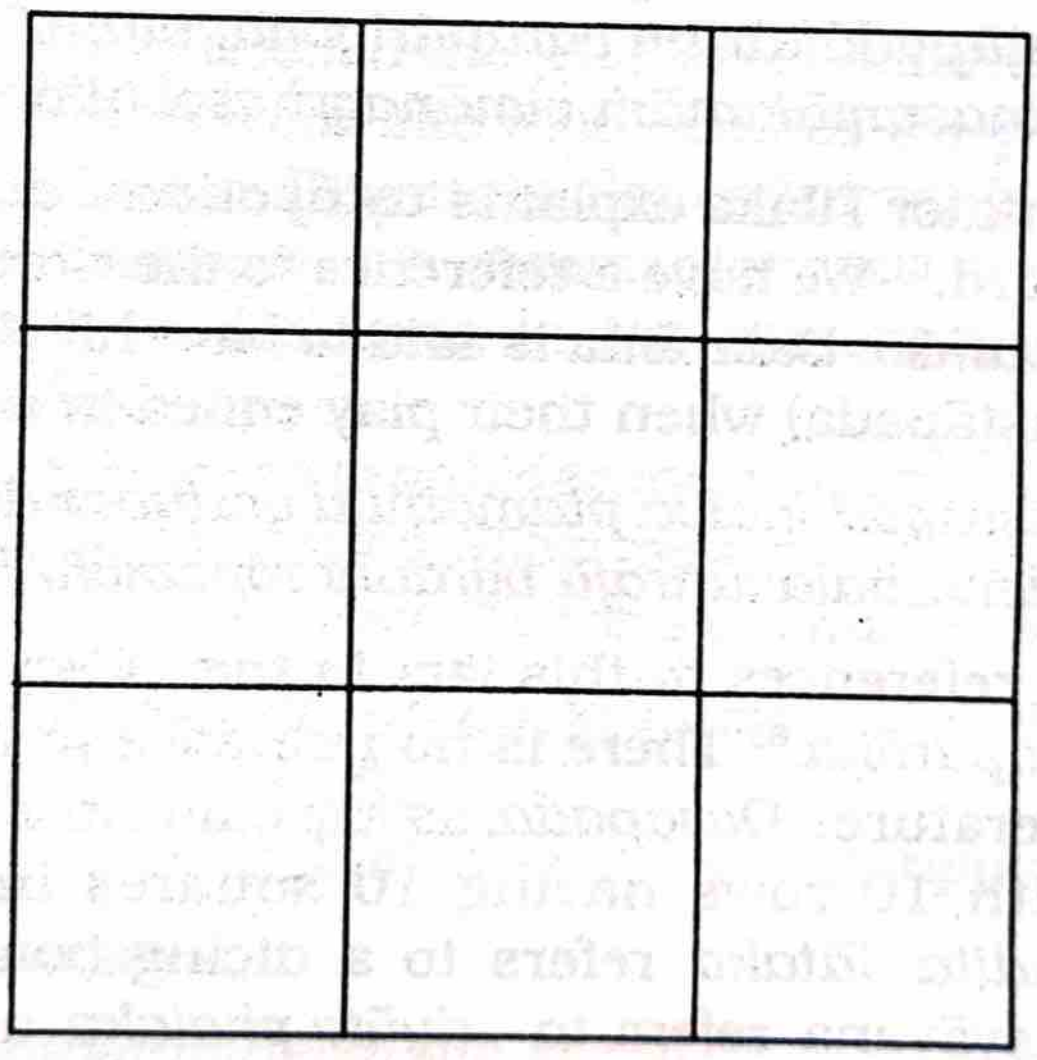

Figure 2

slabs contain rows of two, three and five consisting of some number of squares in each respective row, used in the dice-play.[68]

Fig. No. 3 contains five rows. The game played using this board might have been similar to the modern game of *Pacchis* which also requires a similar board. Some of the boards used in the modern games resemble the boards found at

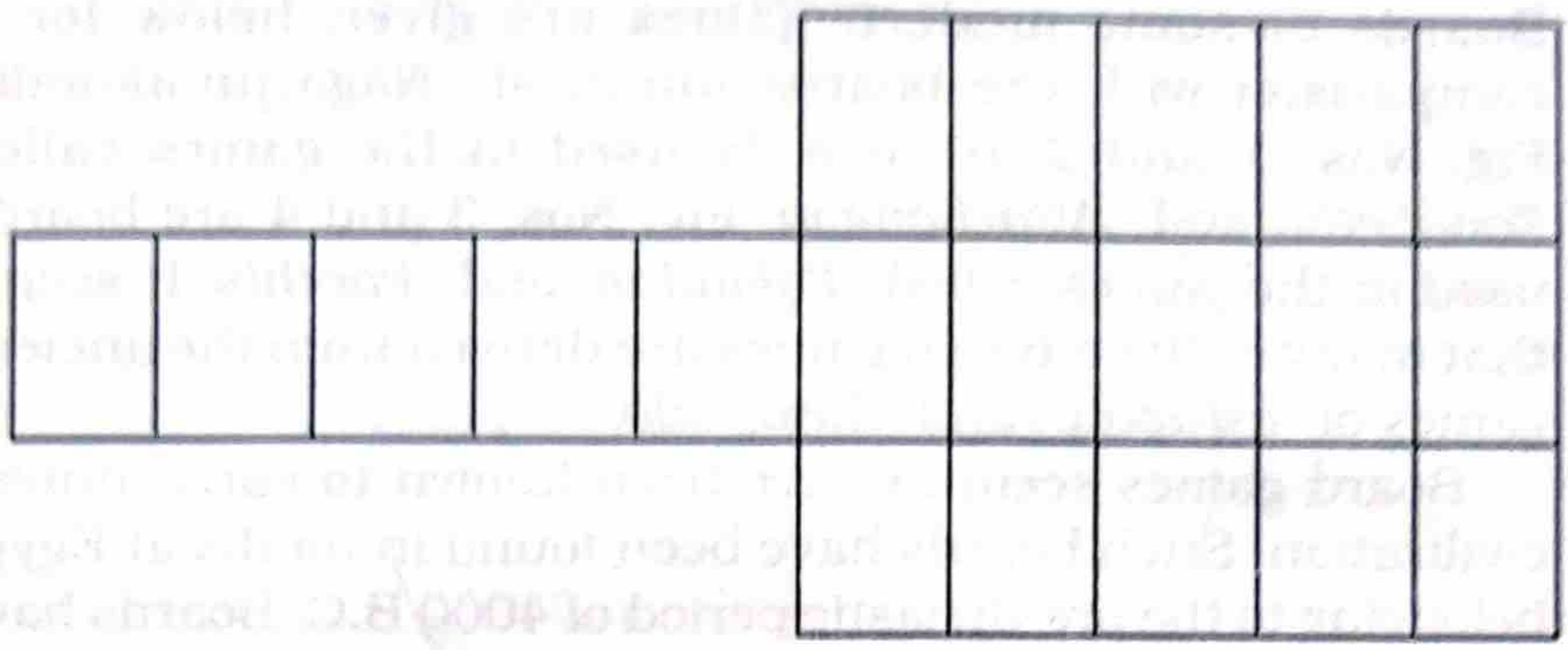

Figure 3

Game-Boards from Nāgārjunakoṇḍa

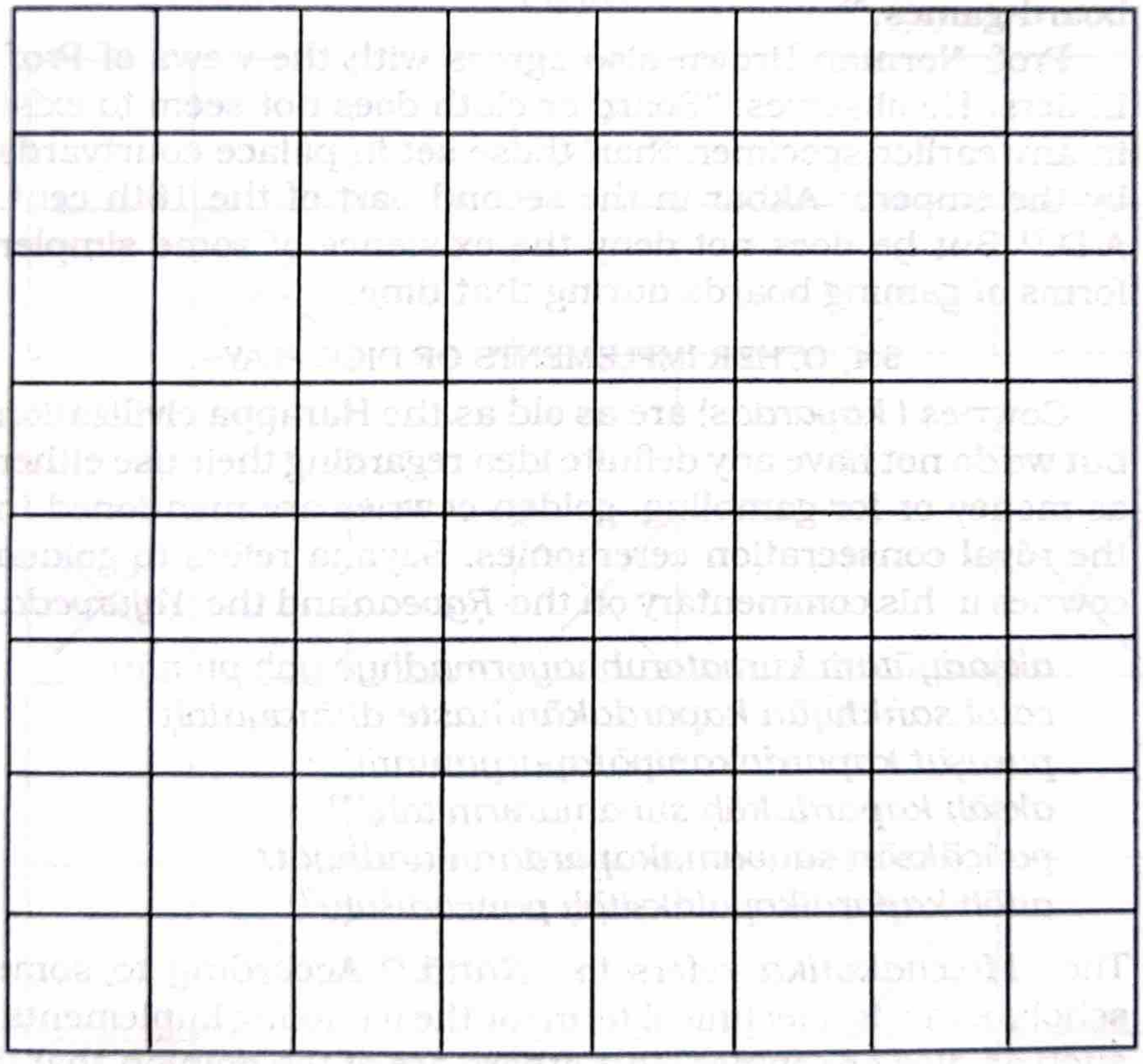

Figure 4

Nāgārjunakoṇḍa and show that there is not much disparity between the games played in ancient and modern times.

Boards of some modern games are given below for a comparison with the boards found at Nāgārjunakoṇḍa. Fig. Nos. 1 and 2 are boards used in the games called *Zanabetha* and *Attachamma*. Fig. Nos. 3 and 4 are boards used in the games called *Pulijüdam* and *Pacchis*. It seems that many of the modern games are derived from the ancient games of *aṣṭāpada* and *daśapada*.

Board-games seem to have been known to early human civilization. Such boards have been found in tombs at Egypt belonging to the pre-dynastic period of 4000 B.C. Boards have also been found in the pre-historic ruins in Palestine. It may be said that in pre-historic India too board-games were known.[69] Mr. Mackay is of the opinion that the dice discovered in Mohenjodaro were quite possibly used in conjunction with board-games.[70]

Prof. Norman Brown also agrees with the views of Prof. Lüders. He observes: "Board or cloth does not seem to exist in any earlier specimen than those set in palace courtyards by the emperor Akbar in the second part of the 16th cent. A.D.[71] But he does not deny the existence of some simpler forms of gaming boards during that time.

5.4 OTHER IMPLEMENTS OF DICE-PLAY

Cowries (*kapardas*) are as old as the Harappa civilization but we do not have any definite idea regarding their use either as money or for gambling. golden cowries are mentioned in the royal consecration ceremonies. Sāyaṇa refers to golden cowries in his commentary on the *Ṛgveda* and the *Yajurveda*.

akṣadyūtaṁ kurvatorubhayormadhye yaḥ pumān
catuḥsaṅkhyān kapardakān haste dhārayataḥ
puruṣāt kapardakanipātaparyantaṁ..[72]
akṣāḥ kapardakāḥ suvaṃanirmitāḥ/[73]
pañcākṣān sauvaṃakapardānnidadhyāt/
aitāḥ kapardikopalakṣitāḥ pañcadiśaḥ/[74]

The *Mṛcchakaṭika* refers to *Kattā*.[75] According to some scholars this is a technical term for the gambling implements, such as dice or cowries. But others are of the opinion that it refers to a kind of gambling called "Nandipura".[76]

There is no reference to any box for putting dice before throwing them down. But the word *akṣāvapana* mentioned in the *Brāhmaṇas* refers to a case for keeping dice.[77] In the

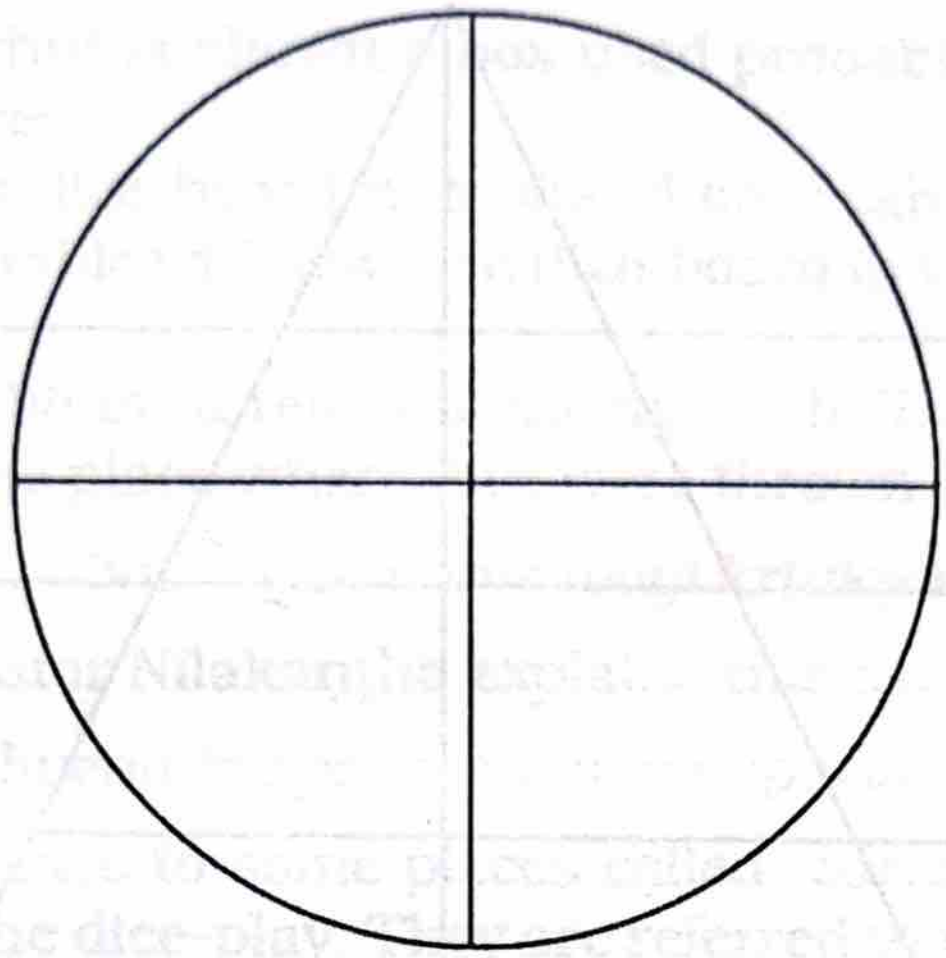

Figure 1

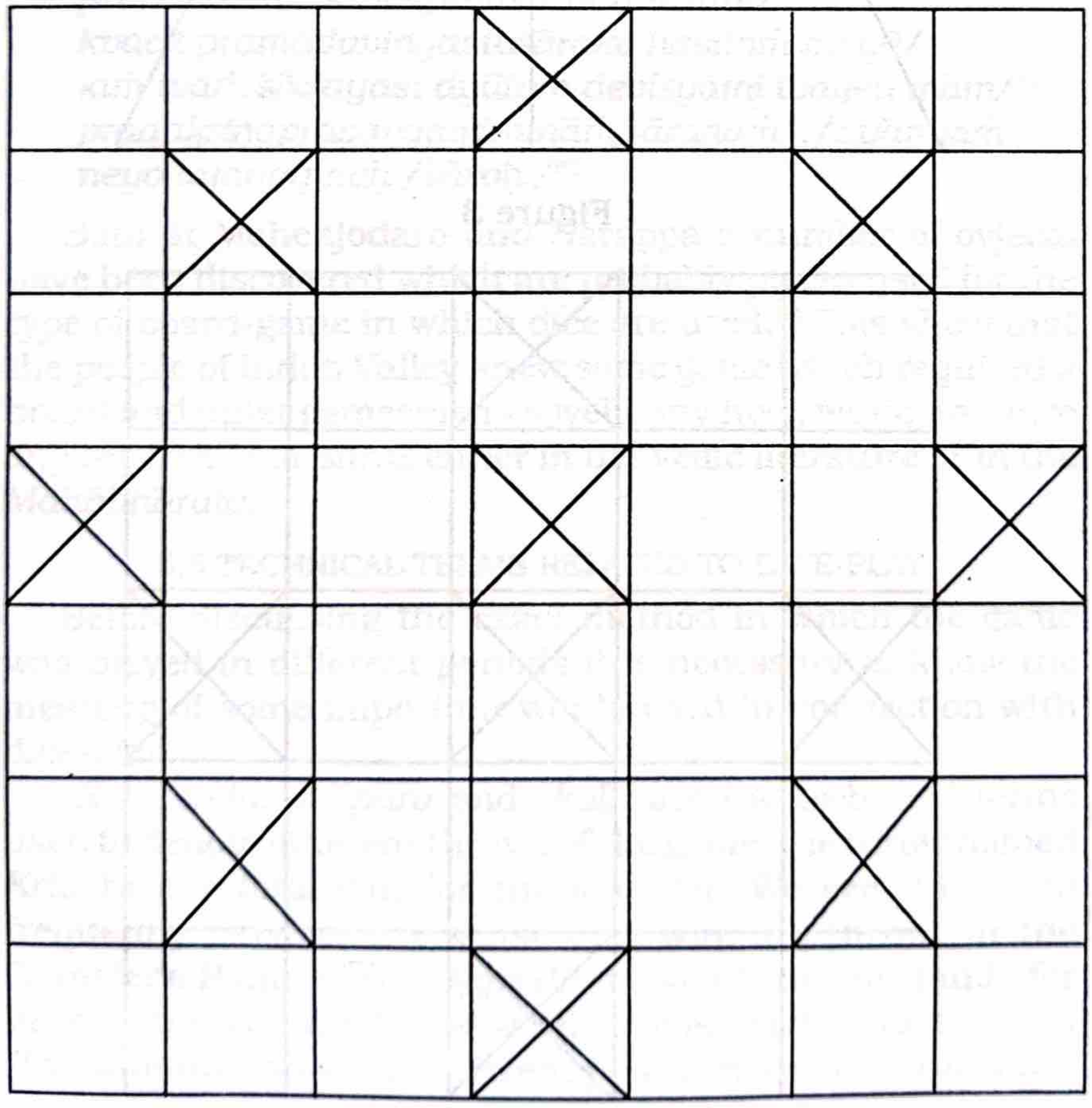

Figure 2

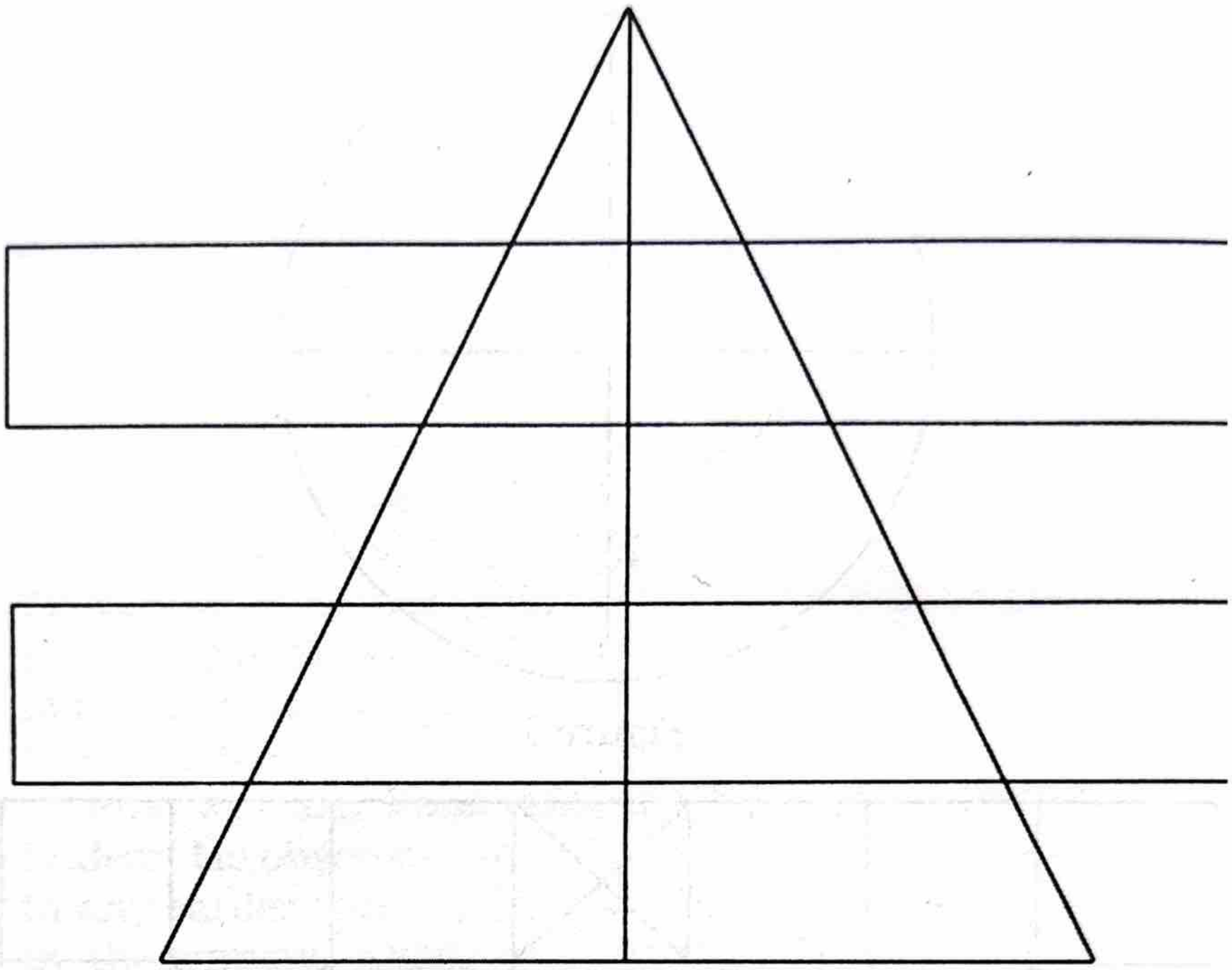

Figure 3

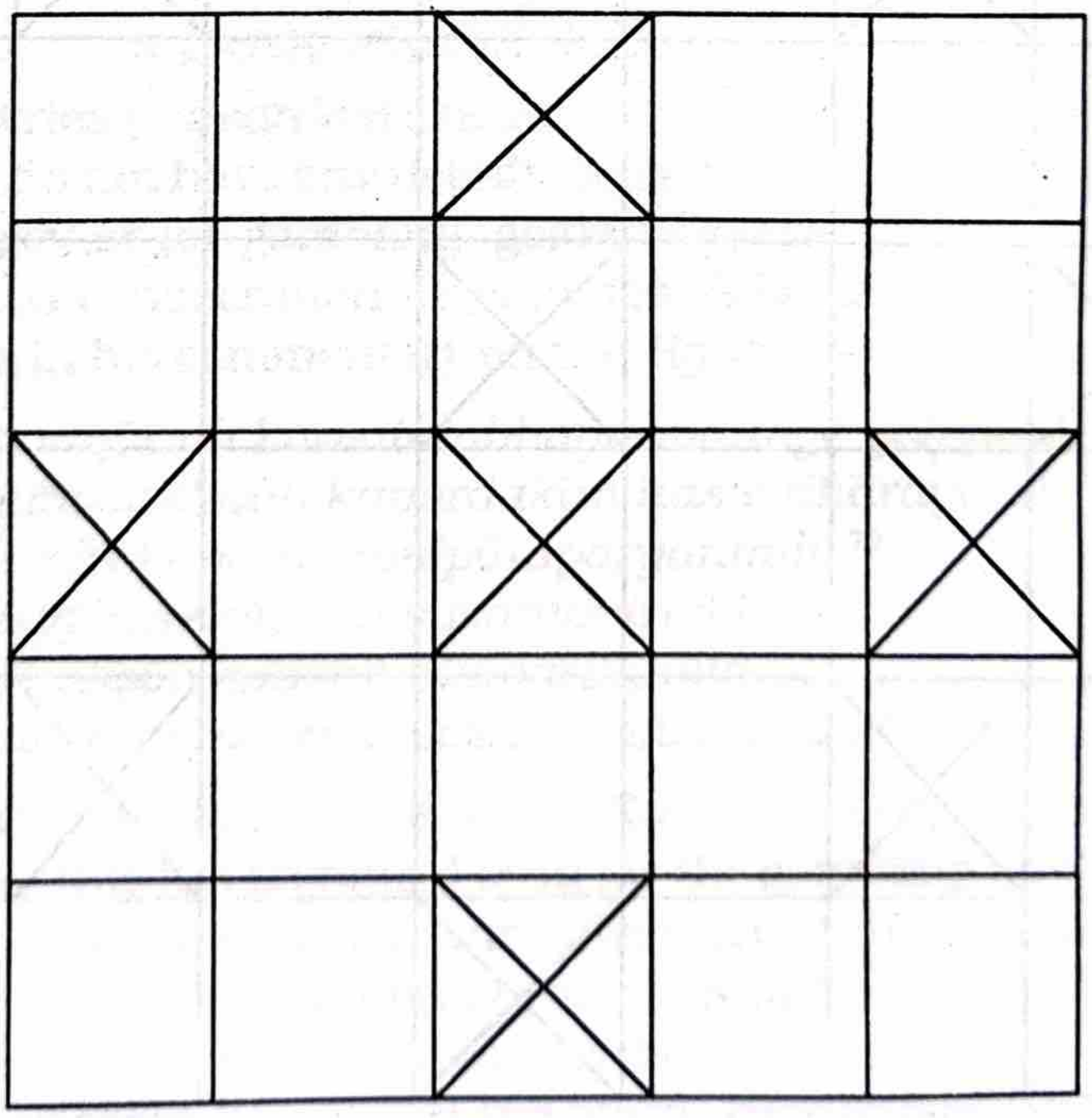

Figure 4
Boards of Some Modern Games

stūpa at Bharhut is shown a box used probably for keeping the small pieces.

Sometimes dice-board was placed on a table. We have a reference to a table with jewelled dice-board in the *Cārudatta* of Bhāsa.[78]

The *Mahābhārata* refers to dicing-cloth. This used to be spread over the place where dice were thrown.

upastīṃā sabhā rājan sarve tvayi kṛtakṣaṇāḥ/[79]

The commentator Nīlakaṇṭha explains this as:

āsphurākhyenā kṣapātanavāsasā uparistīṃā etc.[80]

We have reference to some pieces called *śāras* used in the later form of the dice-play. They are referred to in *DKC, ASK,* and the *Mahābhaṣya* of Patañjali.

prahasaṁ ca kincitpramādadattaśāre/[81]
kvacit pramādavinyastaśārake hasitaṁ mayā/
kiṁ tvaṁ śikṣayasi dyūtaṁ devisyāmi tvayeti mām/[82]
pradakṣiṇaprasavyagāmināṁ śārāṇāṁ.../ayānyaṁ neyo-ayanayīnaḥ /śāraḥ./[83]

Both at Mohenjodaro and Harappa a number of ovjects have been discovered which are probably pieces used for the type of board-game in which dice are used.[84] This show that the people of Indus Valley knew some game which required a board and other gamesmen as well. Any how, we do not have any reperence to *śāras* either in the Vedic literature or in the *Mahābhārata.*

5.5 TECHNICAL TERMS RELATED TO DICE-PLAY

Before discussing the exact method in which the game was played in different periods it is necessary to know the meaning of some important words used in connection with dice-play.

Kṛta, treta, dvāpara and *kali* are the technical terms used to denote different throws of the game. the throw named *Kṛta* brings total win for the gambler. We see this word frequently used in the sense of a winning throw. In the Gambler's Hymn of the *Ṛgveda* the word *dṛtāni* stands for lucky throws at dice.[85] The word *kṛta* is used in the sense of "the winning throw" at different places in Vedic literature:

sa savyena yamati vrādhataścit
sa dakśiṇe saṅgṛbhītā kṛtāni/

("With the left hand he controls even the increasing wealth, in the right he holds accumulated winnings").[86]

tvayā vayaṁ..bhare kṛtaṁ vi cinuyāma śāśvat/

("We shall gather all the winnings in the context").[87]

uta praḥāmatidīvyā jayāti/
kṛtaṁ yacchvaghnī vicinoti kāle/

("He secures wealth as a gambler, wins the lucky throw at play by outplyaing the opponent dicer").[88] Āpastamba and Kātyāyana consider *kṛta* as a winning throw.[89] Bhāradvāja says that the sacrificer should win the highest throw in the game, namely, *kṛta* and get up. In the *Chāndogya Upaniṣad*, *kṛta* is stated as the winning throw. Reference is made to *kṛta* in the *Aṣṭādhyāyī* of Pāṇini also.[90] In the *Sabhāparvan* of the *Mahābhārata Śakuni* is described by Vidura as *kṛta-hasta*, i.e., one who takes a winning throw.[91] brings victory to the player.[92] In the Buddhist literature also the word *kṛta* is used in the sense of a winning throw. In *VPJ*, we have the statement *rāja kaliṁ vijinaṁ aggahesi kaṭaṁ aggahī* ("The king played the losing throw and Yakka Puṇṇaka, the winning throw"). In the *Bhūridatta Jātaka* also the word *kṛta* is used in the sense of gain.[93] Secondarily the word *kṛta* means 'wealth' and booty. In the following passages of the *Ṛgveda*, *kṛta* is used in its secondary sense.

vi cayemā bhare kṛtam/

("I shall gather booty in battle").[94]

īle agniṁ..vi cayatkṛtaṁ naḥ/

("May (Agni) gather wealth for us").[95]

ut sma..bhare kṛtaṁ vyacedindrasenā/

("Indrasena acquired wealth in battle").[96]

In the *Vedic Index*, it is said that the *Atharvaveda* possibly knew of the *kali* as the winning throw.[97] This view is based on the text *ghṛtena kaliṁ śikṣāmi* found in the Śaunaka-recension of the *Atharvaveda*.[98] It is translated as "with ghee do I aid *Kali*". Prof. Durgamohan Bhattacarya has shown that the *Paippalāda* recension of the text contains the term *kṛta* instead of *ghṛta*[99] Here Agni is addressed for help in

securing victory over the opponent at the game of dice. There is no reason to show why one should drop ghee for getting success. It is stated in the commentary of Sāyaṇ that a "win" itself has been called ghee, because it is strength-giving like that fatty substance. *ghṛtavat sārabhūtena jayalakṣaṇena phalena abhikṣara saṅyojaya/*[100] ("Unite me with the reward of victory which is as substantial as ghee"). But this explanation of the commentator is rather unconvincing. Now the correct line found in the *Paippalāda* reads: " *kṛtena kaliṁ śikṣāmi*" ("With the aid of *kṛta* (the lucky throw) I gain control over *kali*" (the losing throw), i.e., I overwhelm *kali* with *kṛta*). Prof. Bhattacarya futher observes: "The authors of the *Vedic Index*, though aware of the Ṛgvedic evidence pointing to 'the use of the *kṛta* as the winning throw', were misled by this incorrect line *ghṛtena kaliṁ śikṣāmi*."[101] He is of the opinion that when *ghṛtena* occurring in the line is corrected as *kṛtena*, there is no need for such a remark to be made. Further, Apsarases (divine nymphs) are said to have special control over *kṛta* (the winnings at dice) (*kṛtāni kṛṇavānām*).[102] Therefore it is natural that *kṛta* has to be carried for them and not *ghṛta*. In another place also the *Paippalāda* has *kṛta* instead of *ghṛta: tā me hastau saṁ sṛjantu ghṛtena*.[103] One more passage found in the *Paippalāda* also contains the term *kṛta: kṛtenāsmā abhikṣara*.[104] Here the gambler requests Apsarases to "plunge him in the winnings". This idea is not at all unusual in the *Atharvaveda*. The Śaunaka-version itself has an exactly similar idea at another place, where the dice are appealed to for "flooding the gambler" with streams of winning throws.[105]

The throw called *kali* is said to bring complete loss to the player. In the passage found in the *Paippalāda* (I-49-4), the gambler says that he has avoided *kali*. Now it is proved, as we have seen earlier, that the word *kali* used in the *Atharvaveda* also refers to a losing throw and not to a winning throw as understood by the authors of the *Vedic Index*. *Sāyaṇa* also while commenting on the *Atharvaveda* observes: *kaliśabdavācyasyāgamane parājayo bhavati*.[106]

From the *Śatapatha Brāhmaṇa*, it appears that another name for *kali* was *abhibhū*.[107] In the *Vājasaneyī Saṁhitā*, *kali* is called *āskanda*.[108] Pāṇini refers to the losing throw named *kali* in his *Aṣṭādhyāyī*.[109] this Sūtra deliberately reads

kala instead of *kali*, as shown by Kātyāyana's *Vārttika halikalayoratvanipātanam.*

According to this, there can be no desiderative form in *kalayati*, since no one would wish for himself a losing throw. The commentator Nīlakaṇṭha on the *Mahābhārata* says that there is no victory if the throw is *kali: kalipāte jayo nāsti.*[110] Nala lost the game only when he was being possessed by *kali.*[111] We have reference to the word *kali* as a losing throw in the Buddhist literature also. According to the *Dhammapada* a deceitful player (*kitava saṭho*) tries to conceal his losing or *Kali-throw.* The *VPJ* says that the king played the losing throw (" *rāja kaliṁ vichinam*").

The throw named *tretā* brings success to gambler comparatively lesser than the success brought by *kṛta.* The throw named *dvāpara* brings success to a player in a lesser degree compared to *tretā.* Both *tretā* and *dvāpara* are referred to as favourable throws in the *Puippalāda.*[112] The Commentator Nīlakaṇṭha observes in this context: *dvāparādipāte uttarottaravṛddhyā jayo-asti.*[113] In the *Mahābhārata* we have reference to *dvāpara.*

nākṣān kṣipati gāṇḍīvaṁ na kṛtaṁ dvāparaṁ na ca.[114]

It is again stated in the same Epic that Śakuni, a notorious gambler, was born out of *dvāpara* and that he rejoined *dvāpara* after his death.[115]

Uvaṭa refers to four throws of the dice-play in his *Mantra Bhāṣya* on the *Vājasaneyī Saṁhitā:*

kṛtatretādvāparakalayascatvāroakṣāḥ.[116]

Śaṅkarācārya while cmmenting on the *Chāndogya Upaniṣad* says that the side of the die marked four is well-known as *kṛta* in the gambling convention.

kṛto nāma ayo dyūtasamaye prasiddhascaturankaḥ/[117]

Ānandagiri, another commentator, explains the meaning of the other terms, viz., *kali, tretā* and *dvāpara:*

akṣasya yasminbhāge trayo-ankāḥ sa tretā nāma ayo bhavati/yatra tu dvāankau sa dvāparanāmakaḥ/yatraiko-ankaḥ sa kalisaṅgya iti vibhāgaḥ/[118]

The explanations given by Śaṅkara and Ānandagiri apply to

the *pāśaka*-type of gambling, which is different from the *vibhītaka*-game in which only the nuts of the *vibhītaka*-tree are used.

Commenting on the *Āpastamba Śrautasūtra* Rudradatta explains the throws (*ayāḥ*) as follows: "When all dice in a throw are divisible by four, it is termed as *kṛta;* when three dice ar left over after division by four, it is *tretā;* when two dice remain over, it is *dvāpara;* and when the remainder is a single die, the throw is called *kali.*"[119]

In other words, *kṛta* was the name of a die or the side of a die marked with four points or dots. *Tretā* was a throw of a die as well as the side of a die marked with three dots. A die or the side of the die marked with two dots was called *dvāpara* and the die or the side of the die marked with one dot was called *kali.* The St. Petersburg Dictionary also explains these technical terms in a similar way.

While explaining a passage of the *Vājasaneyī Saṁhitā* Sāyaṇa makes the following observation: "The gamę is played with five dice, four of which are called *kṛta,* whilst the fifth is called *kali.* If all the dice fall uniformly (*ekarūpa*), i.e., with the marked sides either upwards or downwards then the player wins, and in that case *kali* is said to overrule the other dice."[120]

Prof. De Vreese is of the opinion that before playing, the dicers predicted the results of their game. If the events agree with the prediction, it is called *kṛta,* i.e., "the prediction is correct", and the game is won. If otherwise, the game is called *kali* and lost. From this he concludes that the terms *kṛta* and *kali* conveyed not an absolute, but only a relative sense.[121]

5.6 CONNECTION BETWEEN THE YUGAS AND DICE

It is quite well known that the four Ages of the world are called *kṛta, tretā, dvāpara* and *kali* in Hindu literature. These periods or *Yugas* are named after the sides of a die.[122] *Kṛta,* the lucky one, being the side marked with four dots; *tretā,* with three; *dvāpara,* with two and *kali,* the losing one, with one dot. It may be said in general that the proportion of virtue, and the length of each *yuga* conform to the number on the side of a die, after which it is named. According to the tradition virtue (*dharma*) was fully present in men during the *kṛtayuga* when *Dharmadevatā,* metaphorically called a cow, is said to stand on her four feet. There was a general decline of virtue

kala instead of *kali*, as shown by Kātyāyana's *Vārttika halikalayoratvanipātanam.*

According to this, there can be no desiderative form in *kalayati*, since no one would wish for himself a losing throw. The commentator Nīlakaṇṭha on the *Mahābhārata* says that there is no victory if the throw is *kali: kalipāte jayo nāsti.*[110]

Nala lost the game only when he was being possessed by *kali.*[111] We have reference to the word *kali* as a losing throw in the Buddhist literature also. According to the *Dhammapada* a deceitful player (*kitava saṭho*) tries to conceal his losing or *Kali-throw.* The *VPJ* says that the king played the losing throw (" *rāja kaliṁ vichinam*").

The throw named *tretā* brings success to gambler comparatively lesser than the success brought by *kṛta.* The throw named *dvāpara* brings success to a player in a lesser degree compared to *tretā.* Both *tretā* and *dvāpara* are referred to as favourable throws in the *Puippalāda.*[112] The Commentator Nīlakaṇṭha observes in this context: *dvāparādipāte uttarottaravṛddhyā jayo-asti.*[113] In the *Mahābhārata* we have reference to *dvāpara.*

nākṣān kṣipati gāṇḍīvaṁ na kṛtaṁ dvāparaṁ na ca.[114]

It is again stated in the same Epic that Śakuni, a notorious gambler, was born out of *dvāpara* and that he rejoined *dvāpara* after his death.[115]

Uvaṭa refers to four throws of the dice-play in his *Mantra Bhāṣya* on the *Vājasaneyī Saṁhitā:*

kṛtatretādvāparakalayascatvāroakṣāḥ.[116]

Śaṅkarācārya while cmmenting on the *Chāndogya Upaniṣad* says that the side of the die marked four is well-known as *kṛta* in the gambling convention.

kṛto nāma ayo dyūtasamaye prasiddhascaturankaḥ/[117]

Ānandagiri, another commentator, explains the meaning of the other terms, viz., *kali, tretā* and *dvāpara:*

akṣasya yasminbhāge trayo-ankāḥ sa tretā nāma ayo bhavati/yatra tu dvāankau sa dvāparanāmakaḥ/yatraiko-ankaḥ sa kalisaṅgya iti vibhāgaḥ/[118]

The explanations given by Śaṅkara and Ānandagiri apply to

the *pāśaka*-type of gambling, which is different from the *vibhītaka*-game in which only the nuts of the *vibhītaka*-tree are used.

Commenting on the *Āpastamba Śrautasūtra* Rudradatta explains the throws (*ayāḥ*) as follows: "When all dice in a throw are divisible by four, it is termed as *kṛta;* when three dice ar left over after division by four, it is *tretā;* when two dice remain over, it is *dvāpara;* and when the remainder is a single die, the throw is called *kali.*"[119]

In other words, *kṛta* was the name of a die or the side of a die marked with four points or dots. *Tretā* was a throw of a die as well as the side of a die marked with three dots. A die or the side of the die marked with two dots was called *dvāpara* and the die or the side of the die marked with one dot was called *kali.* The St. Petersburg Dictionary also explains these technical terms in a similar way.

While explaining a passage of the *Vājasaneyī Saṁhitā* Sāyaṇa makes the following observation: "The game is played with five dice, four of which are called *kṛta,* whilst the fifth is called *kali.* If all the dice fall uniformly (*ekarūpa*), i.e., with the marked sides either upwards or downwards then the player wins, and in that case *kali* is said to overrule the other dice."[120]

Prof. De Vreese is of the opinion that before playing, the dicers predicted the results of their game. If the events agree with the prediction, it is called *kṛta,* i.e., "the prediction is correct", and the game is won. If otherwise, the game is called *kali* and lost. From this he concludes that the terms *kṛta* and *kali* conveyed not an absolute, but only a relative sense.[121]

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in the succeeding periods, when this metaphorical cow is said to stand on three, two and one foot in the *tretā, dvāpara* and *kali-yugas* respectively.

Accordingly the die is named *kṛta, tretā, dvāpara* and *kali* with four, three, two and one dot. Prof. Jacobi observes in this context: "The same proportion holds good with regard to the duration of several Ages. The *Kṛtayuga* lasts 4000 years, to which a dawn and a twilight of 400 years each are added. The same items in *tretā* are 3000 and 300; in *Dvāpara* 2000 and 200; in *Kali* 1000 and 100 years."[123] In the *Aitareya Brāhmaṇa* while describing the merits of exertion, we have reference to the names of *kali, dvāpara, tretā* and *kṛta*. It is said, "A man while lying is the *kali*; moving himself he is *dvāpara*; rising, he is the *tretā*, walking, he becomes the *kṛta*. The commentator Sāyaṇa points out that this is a reference to the famous four periods of the world.

catasraḥ puruṣasyāvasthāḥ/ nidrā, tatparityāgaḥ,
utthānaṁ, saṁcaraṇaṁ ceti/ tāścottarottaraśreṣṭhat-
vātkalidvāparatretākṛtayugaiḥ samānāḥ/[124]

Prof. Haug is of the opinion that these words refer to dice.[125] Prof. A.B. Keith also is of the view that these words clearly refer to dice and not to the periods as understood by Sāyaṇa. He holds this view because according to him the Ages are not Vedic.[126] Explaining a passage of the *Śatapatha Brāhmaṇa* Sāyaṇa states that there is relationship between the four periods of the world and the throws of dice-play:

adharmapādāḥ kalidvāparatretākṛtākhyā
dyūtānurūpeṇa jayāyā parājayāya
dyūtaparāvartāya parivasthānaṁ yanti ya iti ayāḥ
sa catuṣpādadharmakasya kṛtayugasya pratirūpamiti
sa catuṣkasāmānyāt kṛtamityucyate loke/
atra catuṣkasāmānyādeva caturuttarastomaḥ
kṛtamityuktaḥ/[127]

Besides these four throws there existed many other throws to which there are references in the *Mṛcchakaṭika* and Buddhist works. In the *Mṛcchakaṭika* references are made to *tretā, pāvara, nardita* and *kaṭa*.[128] The commentator Pṛthvīdhara says that these are called (in northern India) *tiyā, dūā, nandī (nakkī)* and *pūrā* respectively.[129] Probably *tretā, pāvara* and *kaṭa* would have designated *tretā, dvāpara* and

kṛta throws of the Vedic period. We have reference to two more throws, viz., *gardabhī* and *śakti*.[130] It seems that these two thros were considered as unlucky throws.

In VPJ Yakkapuṇṇaka says that there are 24 throws in playing with dice and they are called *mālika*, *sāvaṭa*, *bahula*, *santi*, *bhadra*, etc. When he asked the king to choose one of the throws the king chose a throw named *bahula* and Yakkapuṇṇaka chose a throw called *sāvaṭa*.[131] These are not explained in any work.

5.7 DURODARA AND GLAHA

The other two important words whose meanings are to be settled are *durodara* and *glaha*. According to the *Amarakośa*, the word *durodara* means gambling if it is used in neuter gender. When used in masculine gender, it means gambler.[132] This interpretation is supported by the *Medinīkośa*[133] and the *Anekārthasaṁgraha*.[134] The commentator of the *Mahābhārata* Nīlakaṇṭha also is of the same opinion. That the term *durodara* refers to gambling when used in neuter gender is acceptable to all scholars. But *durodara* used in masculine gender referring to a gambler is not accepted by Prof. De Vreese. In his opinion the masculine gender refers to the stock of dice with which the game is played. According to him the interpretation of *durodara* as *dyūtakāra* is the result of a misunderstanding due to the fact that the term no less than the game in which it figured was obsolete in the time of Nīlakaṇṭha and the lexicographers. Therefore he says that in those places where *durodara* has been explained as *dyūtakāra (-kārin-kṛt)* by Nīlakaṇṭha and the lexicographers, the meaning "store or heap of dice" should be substituted for it.[135] According to him this inference is to be made from several passages of the Epic. In the *Mahābhārata* vidura carries the invitation of Dhṛtarāṣṭhira Yudhiṣṭhira for a game of dice and says:

durodarā vihitā ye tu tata
mahātmanā dhṛtarāṣṭreṇa rāgyā/[136]

Prof. De Vreese is of the opinion that the word *durodara* here means "heaps of dice" arranged by King Dhṛtarāṣṭra, but Nīlakaṇṭha explains *durodarāḥ* as *dyūtakārāḥ*.[137] Again in another place Kṛṣṇa declares that if he had been present at the fatal dicing-match, he would have restrained Śakuni

and would have destroyed the *durodaras* present there.[138] Nīlakaṇṭha explains *durodarān* here as *dyūtakārān*. Here also according to Prof. De Vreese *durodara* means the heap of dice. Further examples given by him to justify his stand refer to comparisons made between the battle and the dice-play. At one place Droṇa compares the army with *durodara* and the arrows with the dice.[139] Nīlakaṇṭha as usual explains *durodaram* as *dyūtakāriṇam*. Here the comparison is made between *senā* and *durodara*. It is not two gamblers, but two games which are compared with each other. As with the army a battle is fought, so with the *durodara* a game is played and hence *durodara* here should mean the stock of dice. In the same Epic Arjuna compares his bow *Gāṇḍīva* with *durodara*, his battle-car with the dicing-place and his arrows with *glahas*.[140] The comparison is clear. As the battle is fought with the bow, which discharges arrows, so the game is played with *durodara* which procures dice. In this place Nīlakaṇṭha, in contrast to his former interpretations, explains *durodara* as *pāśa*. Thus Nīlakaṇṭha is not consistent in explaining the word *durodara* used in masculine gender and this encouraged prof. De Vreese to give a new meaning for that word.

Another word connected with the game is *glaha*. This word denotes the throw at dice and it is a later form of the word *grābha* which occurs in the *Atharvaveda*.[141] In the Ṛgveda also we have the word *grabha* which designates the throw of dice.[142] *Yājñavalkya Smṛti*[143] there is a reference to this word which has been explained by the commentary called Mitākṣarā as *kitavaparikalpita paṇa*.[144] According to Pāṇini the form *glaha* instead of *graha* is used in connection with the game of dice.[145] As stated in the *Amarakośa* the word *glaha* refers to stake.[146]

In the *Sabhāparvan* of the *Mahābhārata glaha* invariably means a "wager". Śakuni says that dicing, a noble game, was maligned only because of its associaiton with a stake.[147]

Prof. De Vreese says that *glaha* is that factor in the game which decides, and on which the result of the game is dependent. According to him the purport of the term *glaha* may be deduced from those passages where battle is compared with game. The following passage may be considered in this connection:

glahān dhanūṁṣi me viddhi śarān akṣāṅśca bhārata

akṣāṇāṁ hṛdayaṁ me jyām rathaṁ viddhi mamāstaram/[148]
Nīlakaṇṭha explains the word *glaha* as *paṇa* or stake: *glahān paṇān/ pāśādhīno glahaḥ paṇo jayaparājayarūpo vyavahāraḥ/*[149] Here the battle-car is compared with the dicing-place, the bow with *glaha*, the bow-string with the skill in dicing, and the arrows with the dice. The bow is compared with the *glaha* because on the bow depends the quality of the shot; the quality of the play also is dependent on the *glaha*. As seen earlier, Arjuna compares the *glahas* with the arrows, *durodara* with the bow, and the dicing-place with the-battle-car. As Arjuna's arrows never miss the mark, so the *glahas* unfailingly kill the opponent in gambling.

At another place the Sindhuking Jayadratha is compared to the *glaha*.[150] Jayadratha being the general of the army, the decision of battle rested in him. At one place Nīlakaṇṭha geves a technical explanation for the word *glaha*. He explains *glahaṁ jagrāha saubalaḥ* as *pāśaṁ pātitavān*, etc.[151] It appears that in commenting on the terms of gambling Nīlakaṇṭha had in mind the *pāśaka* game. However, this explanation indirectly supports the view of Prof. De Vreese according to whom *glaha* is the grasp made by the gambler from the *durodara* and subsequently thrown down upon the *adhidevana*, to be counted. Prof. De Vreese further observes: "Linguistically speaking, the word *glaha* belongs to the root *glah* which is identical with the root *grah* to grasp, whence follows that *glaha* is identical with *graha* (a grasp)."[152]

Prof. Caland interprets the word *glaha* as the handful of dice, which one takes up and this view is very close to the one held by Prof. De Vreese.

Prof. Lüders considers the word *glaha* as referring to the dice which one holds in readiness in one's hand, for the throw.[153] This view is disputed by Prof. G.J. Held on the ground that if this interpretation is accepted the word *kaliglaha* becomes unintelligible. According to him one cannot know if the dice one holds in one's hand will produce *kali* or not.[154]

If a player always gets unlucky throws he may be called *kalihasta* unlike Śakuni who was called *kṛtahasta*. In this case it is possible to anticipate the unlucky throws and therefore the term *kaliglaha* becomes meaningful.

5.8 THE VIBHĪTAKA-GAME AS PART OF SACRIFICIAL RITUAL

As seen earlier a dice-play is prescribed both in the

Rājasūya and the *Agnyādheya* sacrifices. The description of the dice game in these sacrifices seems to show that no game was played as such. What we have is a reference to the preparation of *adhidevana* (a place where dice are to be thrown) and the collection of *vibhītaka*-nuts or dice covered with gold, silver, etc. But when the king arrives at the place of the game, the priest will hand over five dice saying that those are the dice with which the king had won the game. The *rājasūya* being the symbolic ceremony to mark the victory of the king, it cannot have any subsidiary ceremony in which a defeat may come to the king. This musf have been the reason for the avoidance of an actual game of dice on such occasions. This view is also supported by Sāyaṇa.[155]

Scholars like Prof. G.J. Held say that the dice-play described in the rituals is not symbolic in nature.[156] His view is based on the expressions like *akṣān, nyupya* (one throws the *(akṣas)*, *vyūhya* (divides them), *samūhya* (brings them together again); etc. used in the *Śrautasūtra*[157]

5.9 THE SECULAR VIBHĪTAKA-GAME

This game was played using the nuts of the *vibhītaka*-tree. These nuts had no numerals marked on them. The shape of these nuts does not allow any side to be on top. These nuts were used in large number and we have allusions to this in the Vedic literature. The Gambler's Hymn refers to a large number of nuts used in the game.[158]

Scholars give different interpretations to the word *tripaṇcāśaḥ* which occurs in the Gambler's Hymn.[159] It is fifteen according to Ludwig, Weber and Zimmer.[160] Sāyaṇa[161] renders it as 53 which is grammatically correct and this is accepted by Profs. Roth and Grassmann. Lüders interprets it as one hundred and fifty.[162]

The references found in the *Śrautasūtras* also point to the large number of dice used. They prescribe more than 100 or 1000 dice for the *Rājasūya*, and 104 for *Agnyādheya*.*163*

The references found in theMahābhārata also justify the view that a large number of dice were used in the game. One passage states that heaps of dice were thrown down by Śakuni in his match against Yudhiṣṭhira.[164] The commentor Nīlakaṇṭha also explains the word *akṣapūgān* occurring in this passage as *akṣasamūhān* (many dice).[165]

Some scholars are of the opinion that this game was played with a few dice.[166] They find support in the following passage of the *Ṛgveda* which refers to four dice: *caturaściddhādamānādvibhīyāt*, etc. The reference to the priest handing over five dice to the king described in the *Brāhmaṇas* earlier is also in favour of this view. On the basis of the available evidence it may be stated that a large number of *vibhītaka*-nuts were used both in the ritual and secular *vibhītaka* games.

The Method of Playing

The technical terms used in the game such as *durodara*, *adhidevana*, *glaha*, etc. are explained by scholars in different ways to suit their own conception of thè method in which the game was actually played. The verbs used in connection with gambling in the Vedic literature such as *nivapati*, *prakṣipati*, etc. are also helpful in understanding the methodology of the game.

According to Prof. Lüders, one throws a certain number of dice on the place of playing *(adhidevana)* and the other then throws a number of dice to make up a multiple of four or five.[167] The result is made known in terms of *kṛta*, *tretā*, *dvāpara* and *kali*. If the total number of dice is devisible by four or five it is *kṛta*. If three dice are left over after the division by four or five it is *tretā*, etc. King Ṛtuparṇa according to the *Mahābhārata* was an expert in dice-play and was known for his power of computation.[168] The theory of Prof. Lüders explains the significance of Nala's learning *akṣahṛdaya* from Ṛtuparṇa and later defeating his brother Puṣkara in the game of dice.

In the opinion of Prof. Caland a certain number of *vibhītaka*-nuts are placed on the *abhidevana*. Each player takes some dice and makes a *glaha* and on this depends the game.[169]

Prof. G.J. Held describes the game as follows: A number of *akṣas* were thrown down, and tose *akṣas* which fell down on a definite side were taken into account. The dice which were counted were called *glaha*, those not counted, *śeṣaṇa*.[170] These two words are used in the *Atharvaveda* in connection with dicing.[171] It may be noted that the *glaha* has been explained by many scholars but the word *śeṣaṇa* was left unexplained.

Both Profs. Caland and Lüders agree that the game depended on quick and accurate counting of the dice. They hold this view on the basis of the great number of dice used in the game.[172] They find support in the fact that King Ṛtuparṇa, who knew the heart of the *akṣas*, was an excellent counter.

According to Prof. De Vreese the *vibhītaka* game was a matter of odd and even. His interpretation of the words *durodara* (stock of *vibhītaka-nuts)* and *glaha* (grasp made by the player) has already been referred to. In his opinion the *vibhītakas* are thrown down from the *akṣāvapana*, the vessel in which dice are preserved. They can constitute the stock to be played with, i.e. the *durodara*. Now both the dicers take their seats face to face. Arrangements are then made with regard to the number of *glahas*, the stake, etc. according to individual wishes. It is then that the match begins.

Supposing that *A* is the first to play, two cases are possible; if his *glaha* is right, the game is won and finished, and a fresh game is played. If, however, his *glaha* is wrong, the game continues and it is the turn of *B* to make a *glaha* from the *durodara*. If *B's glaha* is correct, the game is over and another game is started. But if his *glaha* proves to be wrong, it is the turn of *A* again and so on. In the case *A* is the first to play and wins, and consequently another game is played, it is *B* who is the first to make a *glaha* and so on. Accordingly, in the special case a match of one *glaha* only is agreed upon and if *A* wins, the role of *B* is of a merely passive nautre. The method of playing visualized by Prof. De Vreese is simple. The dicer grasps (i.e., makes a *glaha*) some dice from the stock of *vibhītaka*-nuts (*durodara*) and subsequently throws them down upon the *adhidevana*. If the number of dice grasped proves to be odd or even in agreement with their earlier declaration, the game is won. If not, it is lost. Prof. De Vreese finds support for his theory in some of the passages found both in Sanskrit and Buddhist literature. In many places it is stated that the loss was due to one die. In the Gambler's Hymn we have the statement *akṣasyāha-mekaparasya hetoḥ* ("I have driven my devoted wife away in consequnece of one *akṣa* having exceeded the agreement").[173]

The *Pāyāsisuttānta* of the *Dighanikāya* describes how a gambler playing false swallowed each *akṣa* which brought about the loss of his game.[174] It is further stated here that by acting thus each lost game was converted into victory. This shows that the difference between the victory and the defeat must have amounted to one die only.

Prof. De Vreese also has rejected the views of Professors Lüders and Caland according to whom the *vibhītaka*-game was a mere matter of counting. According to him it is humanly impossible to count in a moment the number of dice while making the *glaha*. He obwerves in this context: "In the most favourble case, given always the same *durodara* a certain routine gained in the course of time might have made it possible to make every time the *glaha* wished for, though in that case it is no longer a matter of counting as meant in the *Nalopākhyāṇa*. Consequently there remains only the factor of hazard which alone, I think, made the game so attractive to the gambler."[175]

We have some other evidences to prove that the *vibhītaka* game was indeed a game of chance.

In the *Mahābhārata* Śakuni tells Yudhiṣṭhira that the dice produce numbers by themselves and they do so, governed by fate.[176] The commentator Nīlakaṇṭha observes:

> *na tu atra svecchayā kapātaṁ karttuṁ śakyaṁ*
> *daivādhīnatvād akṣapātasyetyarthaḥ/*[177]

As seen earlier according to the *Atharvaveda* magical powers were active int he game of dice. The victory in gambling is ascribed to the interference of Apsaras, who is consequently invoked to grant success by her *māyā*. It is stated that Apsaras makes the *kṛta* in the *glaha* (*glahe kṛtāni kṃavānām*) and that she grasps the *kṛta* in the *glaha* (*glahe kṛtāni gṃānām*). She is also said to take the *kṛta* away from the *glaha* (*ādadānā kṛtam glahāt*).

Prof. De Vreese is of the opinion that the secular *vibhītaka* game is determined by two factors only, viz., *kṛta* and *kali*. The terms *tretā* and *dvāpara*, so well-known from literature both as names of special *glahas* and special *yugas*, are not in place in the secular *vibhītaka* game but belong to the other variety of the game (i.e. ritual *vibhītaka* game).[178] But his suggestion that the other terms *tretā* and *dvāpara* have

no place in the secular *vibhitaka* game, is not fully supported by the evidence available.[179]

5.10 THE PĀŚAKA, THE PAÑCIKĀ AND OTHER FORMS OF DICE-PLAY

The Pāśaka Game

In the *Aṣṭādhyāyī* of Pāṇini we have reference to *śalākā*, which has been explained by Patañjali in his *Mahābhāṣya*.[180] According to Prof. Lüders the game as explained by Patañjali resembles the *pāśaka* game found in one Burmese manuscript of *VPJ*, in which, instead of *vibhītaka*-nuts, *pāśaka* with four marked sides are used.[181]

Pāśakas are the dice upon the sides of which a certain number of eyes are marked. Symbols have in part been substituted for the concrete *vibhītakas*. According to Prof. De Vreese these *pāśakas* are thrown up in a game and after they have fallen down, the sides turned upwards are counted. If the number of dice cuunted is in agreement with the prediction, the game is *kṛta* and deemed won. If not, it is *kali* and tost.[182] Thus in the *pāśaka* game the original large number of dice has been substituted by a small number of marked rectangular dice. Here stress lies on the act of casting whereas in the *vibhītaka* game the act of grasping is important.

The *vibhītaka* game must have existed much earlier than the *pāśaka* game. In Mohenjodaro, the dice excavated resemble the *akṣa* of the *pāśaka* game. But this does not affect the conclusion already arrived at, since the culture of Mohenjodaro represents an entirely different stage of civilization.

The Pañcikā Game

Wihle explaining Pāṇini's rule (II-1-10) vāmana and Jayāditya in their *Kāṣikā* refer to *Pañcikādyūta*.[183] This game was played with five dice or five ivory pieces. When all these five pieces fall with faces turned upward, or all with faces turned down, then the thrower wins the game. But when the fall is otherwise he loses it. According to Pāṇini the words *akṣa* (a die), *śalākā* (an ivory piece) and *saṁkhyā* (numeral) are compounded with the word *pari*, and the compound so formed is called *avyayībhāva*.[184] According to Patañjali

ekapari is same as *akṣapari* and *śalākāpari*.[185] It seems that *ekapari* referred to a throw in which one *akṣa* or *śalākā* was different from the rest. In a similar way if two pieces were different the throw was called *dvipari* and when three pieces differed from the rest it was *tripari*.

Other Types of Dice-Play

Besides the *vibhītaka*, *pāśaka* and *pañcikā* games there might have existed other forms of game in which dice were used. In *DKC* we have reference to 25 forms of gambling.[186] Yaśodhara while commenting on the *Kāmasūtra* of Vātsyāyana notices 20 forms. According to him 15 belong to the *nirjīva* class, wherein the stake is an inanimate object, such as money, and 5 belong to the *sajīva* class, which had a living object such as a cock or a ram as the stake.[187]

The *Kāmasūtra* of Vātsyāyana reters ot what is called *ākarṣakrīḍa*[188] But the exact connotation of this term is not known. Some scholars are of the opinion that *ākarṣakrīḍā* and *akṣakrīḍā* are indentical. But Vātsyāyana mentions two boards named *dyūtaphalaka* and *ākarṣaphalaka*. On the basis of this some scholars like Tridibnath Ray consider *ākarṣakrīḍā* to be different from *akṣakrīḍā*. The view that *ākarṣakrīḍā* might have been same as *pāṣakakrīḍā*.[189]

The *Nāradasmṛti* refers to the game of dice played in a different way. In this game one who produced the same number twice used to be considered as the winner.[190]

5.11 RULES GOVERNING THE GAME OF DICE

The *M.Bh.*, *the DKC and the KSS* reveal to us some rules observed in the game of dice and other practices current among the players. While there existed some fundamental codes of conduct, the players were normally supposed to stipulate and follow rules of game from time to time before they actually commenced the play. Once the concerned parties had agreed upon the *modus operandi* of the game, there was no question of going back. Violation of the rules was viewed with contempt.

In the *M.bh.*, Śakuni having invited Yudhiṣṭhira asks him to fix the rules of the game.[191] According to another reference gamblers were not normally allowed to play for others. When Duryodhana told Yudhiṣṭhira that Śakuni would play on his behalf Yudhiṣṭhira said: "Gambling done by a proxy seems

contrary to rules."[192] But Yudhiṣṭhira ultimately yielded when his opponents persisted saying that there was nothing wrong in employing a proxy. Another practice current was that the game in the initial stages consisted of a number of bets. Thus, for instance, the first match between Yudhiṣṭhira and Śakuni consisted of 20 bets. In special cases, however, there could be only one bet, as in the second dicing-match between them.

Another convention that prevailed was that so long as a player was taking the *kṛta* throw (i.e., was emerging lucky), he could go on repeating his throws. But after the *kali*-throw, the turn went to the other player. According to the accounts found in the *M. Bh.* and the *VPJ*, Śakuni and Yakkapuṇṇaka wnet on throwing the dice till the end of the game since they won each time with *kṛta*-throws in a series.

According to the *KSS* if a person invited to gamble declares 'I sit out of this game' he could not be compelled to play. This was the common convention of gamblers.[193] This must have been prevalent during the time of the *M.Bh.* also. Therefore Duryodhana and Śakuni tried their best and ultimately succeeded in making Yudhiṣṭhira accept the invitation for gambling. For, had Yudhṣṭhira categorically declared that "he would sit out of the game" there could have been no gambling, and the story of the *M.Bh.* would have taken a different turn.

Another universal rule current among the gamblers was that if a gambler did not object to the dice being thrown, it was tantamount to his acceptance to play.[194] In the *KSS* a gambler called Thiṇṭhākarāla compelled the deities to pay what they lost in the game on the basis of such an understanding. The deities did not object when he threw the dice after having invited them to play. References are made to such a practice in the *Brahmapurāṇa* and the *M. Bh.* In the play between Rukmin and Balarāma described in the *Brahmapurāṇa* there arose a dispute related to this matter.[195] During the play once Balarāma staked ten million *niṣkas* (gold coins). Rukmin threw the dice and was defeated. Rukmin wrongly claimed himself as the winner on the ground that he did not agree to the stake proposed by Balarāma. A heavenly voice declared Balarāma as the winner on the ground that though Rukmin did not accept the pledge in words, he did so by his acts (having cast the dice).[196]

In the *M.Bh.* also a similar dispute arose when Yudhiṣṭhira

staked Draupadī. Vikarṇa justifying the stand taken by Draupadī said that he did not consider Draupadi as "lost" in the game as Yudhiṣṭhira staked her only at the instance of Śakuni but not of his own accord.[197] Karṇa took the opposite stance and contended that though the suggestion to stake Draupadī came from Śakuni, none of the Pāṇḍavas objected to it.[198] Further, Yudhiṣṭhira kept silent while Śakuni was casting the dice which showed his willingness to play the game.

According to another convention what was won in gambling was not to be returned. This has been alluded to in the story of Akṣakṣapaṇaka found in the *KSS.*[199]

The *M.Bh.* refers to another convention according to which in a fair play, a person skilled at dice was not supposed to play with an unskilled person. Draupadī voices this when she came to know about the defeat of Yudhiṣṭhira at the hands of Śakuni. When Bhīṣma said that Yudhiṣṭhira had voluntarily staked with Śakuni, Draupadī pointed out that Yudhiṣṭhira, with no skill in dice play, was forced to play with skilful, wicked, deceitful and desperate gamblers.[200] Sātyaki also held such a view.[201] According to him the Kauravas violated the vow of a Kṣatriya. A Kṣatriya was not supposed to decline when invited eirther to a battle or a game. Yudhiṣṭhira himself refers to this vow in a few places:

āhūto-ahaṁ na nivarte kadācit
tadāhitaṁ śāśvataṁ vai vrataṁ me//

(*M.Bh.*, Sabhā, 59.16 &18)

The expression " *āhitaṁ śāśvataṁ vrataṁ*" (an eternally enjoined vow) makes it clear that such a practice was normally binding on all well-bred Kṣartiyas. When Bhīma was angry with Yudhiṣṭhira for having staked Draupadī, Arjuna pacifies him stating that Yudhiṣṭhira acted in the true spirit of a Kṣatriya.[202] But this is a strange remark made by Arjuna because gambling has not been mentioned in the list of duties prescribed for the Kṣatriya. Gambling is considered as a vice and cannot be taken to be capable of increasing one's fame. Prof. P.V. Kane observes in this context, "conceding for the sake of argument that indulgence in gambling even on the part of such a virtuous noble and philosophic warrior as Yudhiṣṭhira was justified or at least excusable, there is nothing

to show that the code of kṣatriya chivalry permitted him to gamble away his own spirit, devoted and virtuous queen and his four valiant brothers."[203] Balarāma's views in this context are interesting.[204] According to him the fault lay with Yudhṣṭhira. First, Yudhiṣṭhira's passion for dice was so high that he did not pay heed to the advice tendered by his well-wishers. Secondly, he could have opted to play with others rather than with Śakuni who was a noted gambler. Thirdly, when the dice went against him he could have stopped playing further. As such no blame could be apportioned to Śakuni.

According to one reference found in the *Mṛcchakaṭika* gamblers used to form a sort of association for which they had very high regard. When Saṁvāhaka did not pay the debt which he owed to his opponent, the keeper of the gambling house drew a circle round him and said that Saṁvāhaka was bound by the gambler's ring.[205] Such a circle drawn round the defaulted players is also referred to in some of the *Jātakas* of the Buddha.[206] According to the convention the defaulters could not go out of the ring until the debts were settled. This is somewhat similar to the views expressed in the *Nāradasmṛti* according to which the gamblers should not enter another gambling house before paying their debts.[207]

5.12 THE NATURE OF STAKE AND ELIGIBILITY TO STAKE

As regards the nature of the stake and the eligibility to stake we have some interesting observations both in the *M.Bh.* and the *KSS.* According to the *M.Bh.* one that has no money himself cannot stake the money belonging to others.[208] In the *Ṛgveda* also we have reference to men staking their personal freedom in games.[209] After losing all wealth, men used to stake their dependants besides staking their own selves. According to the Epic, Yudhiṣṭhira staked and lost Nakula, Sahadeva, Arjuna and Bhīma one by one. When nothing was left to stake, Yudhiṣṭhira then staked himself and lost; thereafter, at the suggestion of Śakuni, he staked Draupadī and lost her too. The points raised by different characters of the Epic regarding the propriety of such a stake may be considered in this connection. The very fact that different persons view at it differently makes it clear that there was no final opinion on the issue. Each one had his own interpretation, making the things worst confounded.

According to Vidura people who lost personal freedom did not have any right over their dependants. He contended that Draupadī could not become Duryodhana's property as she was staked by the king who lost himself first in the game.[210] To think that Yudhiṣṭhira had right to stake her was as absurd as claiming money gained in a dream.[211] When Draupadī was informed by Prātikāmin about Yudhiṣṭhira's losing her in the game she did not believe it at first.[212] This indicates that kings' staking their wives in games was not a common practice. Draupadī further said that Yudhiṣṭhira's action only revealed his undue passion for dice.[213] The points raised by Draupadī regarding the propriety of her husband staking her indicate the considerable freedom of speech which women had those days. They could voice their concern against any disastrous steps taken by their husbands although it cannot be said that such attempts always met with general approval and success, as in the case of Draupadī herself. Draupadī contended that Yudhiṣṭhira had lost all right to stake her, having first lost his own independence.[215] In her opinion the play was null and void. Bhīṣma found the issue too complicated for him to decide. He was of the view that Yudhiṣṭhira voluntarily staked and he himself did not consider Śakuni as having adopted deceitful means in the play.[215] Bhīma while taking strong exception to Yudhiṣṭhira's act referred to certain norms of behaviour among the gamblers of those days. According to him a gambler never staked even a woman of loose character much less one's own wife of avowed character.[216] Yudhiṣṭhira was exceptional in that he staked not only his kingdom and himself, but also his brothers and finally his wife.[217] The speech made by Vikarṇa in support of Draupadī also reveals how general public looked upon gambling those days. According to him hunting, drinking, gambling and indulgence in women are the four vices of kings. One addicted to these leads an ignoble life. The words of such a person do not arouse conviction or a sense of authority in others. Yudhiṣṭhira was deeply engaged in one of these vices, viz., gambling, and as such his acts carry no authority or approbation.[218] Therefore Vikarṇa did not consider Draupadī as "lost" in the game of dice. Moreover Draupadī was the common wife of all the sons of Pāṇḍu and Yudhiṣṭhira did not have exclusive right over her.[219] Opposing the stand taken

by Vikarṇa, Karṇa observed that Draupadī was one of the "possessions" of Yudhiṣṭhira and as such, there was no point in Vikarṇa's argument.[220] Karna personally felt that Draupadī, by virtue of marrying five men, had gone against the divine rule which ordains only one husband for one woman.[221]

But still, the question of Yudhiṣṭhira's right to stake his wife remained unanswered in the Epic. A person losing his right over his wife after losing his own personal freedom in the game is hinted at in the Gambler's Hymn of the Ṛgveda also. As we know, at last Dhṛtarāṣṭra intervened. Much to the chagrin of Duryodhana he granted Draupadī's request, and gave the Pāṇḍavas their lost property.

The story of Nala, as already observed, belongs to much earlier period of history even though it is found in the *M. Bh.* Nala's behaviour towards his wedded wife Damayantī is nobler compared to that of Yudhiṣṭhira towards Draupadī. Like Śakuni in the Epic, here also Nala's brother Puṣkara suggested to stake Damayantī when Nala had nothing else to stake. But the words of Puṣkara made Nala blaze with fire. He immediately left that country.[222] This fact can be taken to suggest the high regard women enjoyed in society during the period in which Nala lived.

In the *KSS*, the story of Akṣakṣapaṇaka speaks of people staking their personal freedom in games. Akṣakṣapaṇaka himself had gambled with another person on the mutual understanding that whoever was defeated had to become the slave of the victor. When he defeated his opponents they all became his slaves.[223]

Another point concerning gambling which has drawn the attention of scholars is regarding the question whether the defeated gamblers had to give up their clothes also. We do not have any reference to this practice in the Vedic literature. According to the *M.Bh.* when Draupadī was arguing about the genuineness of Yudhiṣṭhira's action in staking her, Karṇa ordered Duśśāsana to remove the garments of the Pāṇḍavas as well as of Draupadī.[224] Hearing his words the Pāṇḍava brothers took off their upper garment.[225] When Duśśāsana started stripping Draupadī's garments they were miraculously replaced by Lord Śrī Kṛṣṇa.[226]

Profs. Franklin Edgerton and G.H. Bhatt consider that the portion of the *M.Bh.* referring to Draupadī's

Vastrāpaharaṇa (Sabhā, 68, 40-50) is interpolated.

Prof. Edgerton considers Draupadī's celebrated prayer to Kṛṣṇa as interpolated.[227] According to him it is apparently implied (though not stated) that cosmic justice automatically or magically prevented the chaste and noble Draupadī from being stripped in public.

Prof. G.H. Bhatt considers the entire episode of *Draupadī Vastrāpaharaṇa* as an interpolation.[228] His theory is based on two arguments. One is the omission of this from several other contexts in the Epic where recapitulations of the things done by Dhṛtarāṣṭra is given. Second argument is the unlikelihood of such a depraved act being committed even by Duśśāsana. In his opinion this portion has been added later on with the object of depicting the Kauravas in the worst light possible for satisfying the readers whose sympathies. always went with the Pāṇḍavas.

Dr. V. Raghavan, however, observes: "The *Vastrāpaharaṇa* is not a special insult offered to Draupadī, but it is part and parcel of a customary disgrace that has to be there as an aṅga of dyūta."[229] He is of the view that there is no game of dice without the forcible snatching away of the clothes of the defeated or the defeated themselves casting off their *uttarīyas* as an act of submission. This is necessary to make them deprived of everything in their possession. He refers to the episode of Nala where Nala, after complete defect, leaves with a single garment and later, the dice come again as birds and deprive him of even the remaining part of his garment.[230] The address made by the dice in this context is significant.[231]

We have references to gamblers losing their clothes in some stories of the *KSS*. One gambler named Devadatta having lost his clothes could not return to his father's house. So he entered a dilapidated temple.[232] Reference is also made to one Candrasvamin and Śrīdraśana who too had a similar plight.

One gambler called Tuṇḍila, whose story is found in one of the *Jātakas* of the Buddha, also lost clothes on his person and came to his sister's house wrapping him with rag of loincloth.

On the basis of these references, however, it is difficult to state that the forceful removal of clothes of a defeated person was a part and parcel of the game. The episode of

Draupadīvastrāpaharaṇa is a solitary instance. Yudhiṣṭhira's right to stake Draupadī itself is not settled in the Epic. Even in the *KSS* no reference is made to the forcible removal of the clothes of the defeated persons. Further, though the society described in the *Mṛcchakaṭika* and the *DKC* does not show any high standard of morality, we have no reference to a defeated person being forcibly disrobed. Perhaps the loser giving up his second cloth (*uttarīya*) might have been a general practice, though its literal application in the case of Draupadī, trying to disrobe her in public, could never have been in vogue.

REFERENCES

1. Cf. KāSS, XV-6-2; *Āśva.* Gṛh., II-7-10.
2. Cf. *Gautama Dharmasūtra*, I-2-23.
3. See his gloss on the above text.
4. Cf. *Manusmṛti*, IX.223.
5. Cf. *ibid*, IX.223.
6. Cf. *NS*, XVI. 1.
7. See Mallinatha's Commentary on *Kirātārjunīya*, I-7.
8. Cf. *ṚV*, II-29-5; V-85.8; X-34-3, 7&10.
9. Cf. *VS*, *XXX* 18.
10. See his gloss on VS, XXX 18.
11. Cf. *TB*, III-4-16.
12. See his gloss on *TB*, III-4-16.
13. Cf. *ṚV*, I-92-10; II-12-4; IV-20-3; AV, IV-16-5.
14. Cf. *Aṣṭādhyāyī*, IV-4-2.
15. *ṚV*, X.34.5. The *vibhītaka* tree is botanically known as Terminalia Bellerica. In the Ṛgveda the word used is *vibhīdaka* whereas in later literature it is found as *vibhītaka*.
16. See his gloss on *TS*, 1-8-16.
17. *JRAS*, 1908, July, p. 827.
18. *Ibid.*
19. *BSS*, XXII.19.
20. Cf. *M. Bh., Virāṭa, I.25.*
21. *Harivaṁśa*, II-61-37.
22. *Aṇḍabhūta Jātaka* (*Jātaka* No. 62).
23. Cf. *Mṛcchakaṭika*, Act IV, p. 160.
24. *The Indus Civilization*, p. 179.
25. *Taxila*, Vol. 2, p. 663.
26. *VPJ* (*Jātaka* No. 545).
27. *M. Bh.*, Virāṭaparvan.
28. Cf. *NS*, XVI.1.
29. Cf. the commentary on *NS*, *XVI.1*.

30. Cf. *ibid.*
31. Cf. *Keśavavaijayantī* on *Viṣṇusmṛti*, V.135.
32. Cf. *Aṣṭādhyāyī*, II.1-10.
33. Cf. *Arthaśāstra*, III.20.
34. Cf. *Mohenjo-Daro and the Indus Civilization*, Vol. II, p. 551; for pictures see Illustration 9.
35. *The Indus Civilization*, p. 179
36. *ASIAR*, 1908-9, p. 85.
37. *The Stupa of Bharhut*, p. 94.
38. Taxila, Vol. 2, pp. 662-663.
39. *OHRJ*, Vol.X, 1961, Nos. 1&2, pp. 1-4.
40. *ṚV*, X.34.1&9.
41. *AV*, IV.15-12; *TS*, III. 4-8
42. *ṚV*, VIII. 4-3.
43. *Vedic Index*, Vol. 1, p. 80.
44. *Ibid.*
45. See his gloss on *Nirukta*, IX.8.
46. See his gloss on □*V*, X.34-1.
47. See his gloss on *M. Bh.*, Sabhā, 56.3.
48. *Nirukta*, IX.8.
49. Cf. *ṚV*, X.43.5.
50. *AV*. V. 31-6; VI. 70-1.
51. See his gloss on *Nirukta*, V. 22.
52. *ASS*, V. 19.2.
53. *BSS*, II.7.
54. *BhāSS*, V. 12-4.
55. *Āp. Dha.*, II.10-13.
56. See his gloss on the above text.
57. *Dighanikāya*, XXXIII-27.
58. Pāṇini was aware of the word *aṣṭāpada* being used in a technical sense. *Aṣṭādhyāyī*, VI-3-125: *aṣṭanaḥ saṅgyāyām*. Alaka while commenting on *Haravijaya* of Ratnākara (canto XII, ś1. 9) explains the word *aṣṭāpada* as *tasya hi panktau padāṣṭakopetatvā-daṣṭāpadamiti saṅgyā*.
59. See his gloss on *Dīghanikāya*, XXXIII-27.
60. *Rāmāyaṇa*, I-5-16.
61. See his gloss on the above passage.
62. *Harivaṁśa*, II-61-46&54.
63. *Viṣṇupurāṇa*. V-28-23; *Brahmapurāṇa*, Ch. 201, ś1. 23.
64. Cf. *VJP, Jātaka* No. 545.
65. Cf. *Kāmasūtra*, IV-4.
66. *India and Indology*, p. 302.
67. *The Stūpa of Bharhut*, p. 94.
68. *OHRJ*, Vol. X, 1961, Nos. 1&2.
69. See Introduction to *Caturaṅga dīpikā* by Manomohan Ghosh, p. xxvii.

70. *The Indus Civilization*, p. 179.
71. Cf. *India and Indology*, p. 302.
72. See his gloss on □*V*, I.41-9.
73. See his gloss on *TS*, I-8-16.
74. See his gloss on *VS*, X.28.
75. *Mṛcch.*, Act II, ś1. 5.
76. See Pṛthvīdhara's gloss on *Mṛcch.*, Act II, ś1. 5.
77. *SB*, V.3-1.
78. *Cārudatta*, p. 97.
79. Cf. *M.Bh., Sabhā*, 59.9.
80. See his gloss on the above text.
81. Cf. DKC, Ucchvasa, II, p. 76.
82. Cf. *AKS*, Ch. VIII, ś1. 42.
83. See *Mahābhāṣya on Pāṇini's Rule*, 5-2-9.
84. *The Indus Civilization*, p. 179.
85. Cf. *ṚV*, X. 34-6.
86. *Ibid.*, I. 100-9.
87. Cf. *ibid.*, IX. 97-58.
88. Cf. *ibid.*, X.42-9.
89. Cf. *ASS*, V. 20-1; *KāSS*, XV-7-18.
90. *Aṣṭādhyāyī*, III-1-21.
91. Cf. *M. Bh., Sabhā*, 58.13.
92. See his gloss on *M.Bh., Virāṭa*, 50-24.
93. Cf. *JRAS*, 1892, p. 127.
94. *ṚV*, I-132-1.
95. Cf. *ibid.*, V.60-1.
96. Cf. *ibid.*, X. 102-2.
97. Cf. *Vedic Index*, Vol. I, p. 4.
98. *AV*, VII. 109-1.
99. *ALB*, Vol, XXV, p. 202ff.
100. See his gloss on *AV*, VII.109-1.
101. *ALB*, Vol. XXV, p. 202 ff.
102. *AV*, IV. 38-1.
103. *AV*, VII. 109-3; *Paippalāda*, IV-9-5.
104. Cf. *Paippalāda*, I-72-4.
105. *AV*, VII. 50-9.
106. See his gloss on *AV*, VII. 109-1.
107. Cf. *SB*, V.4-4.
108. Cf. *VS*, XXX, 18.
109. *Aṣṭādhyāyī*, III. 1-21.
110. See his gloss on *M.Bh.*, Virāṭa, 50-24.
111. Cf. *M. Bh.*, Vana, 78-22.
112. Cf. *Paippalāda*, I-49-4.
113. See his gloss on M.Bh., Virāṭa, 50-24.
114. Cf. *M. Bh.*, virāṭa, 50-24.
115. Cf. *ibid.*, Ādi, 67-78, Svargārohaṇa, 5.21.

116. See his gloss on *VS*, X. 28.
117. See his Bhāṣya on *Ch. Up.*, IV-1-4.
118. See his Bhāṣya on the above text. See also Nīlakaṇṭha's gloss on *M. Bh.*, Virāṭa, 50-24.
119. See his gloss on *ASS*, V-20-1.
120. See his gloss on *VS*, X. 28.
121. Cf. *Orientalia, Neerlandica*, p. 354.
122. Profs. A.B. Keith and Haug are emphatic that the concept of *Yugas* is only later, for which see below.
123. Cf. *ERE*, Vol. I, p. 200.
124. See his gloss on *AB*, VII-15-4.
125. See *AB* edited by him, part 2, 464.
126. See his notes on *AB*, VII-15-4 in *Ṛgveda Brāhmaṇas*, p. 302.
127. See his gloss on *SB*, XIII-3-2.
128. Cf. *Mṛcchakaṭika*, Act II, śl. 9.
129. See his gloss on the above text.
130. Cf. *Mṛcchakaṭika*, Act II, śl. 1.
131. Cf. *VPJ (Jātaka* No. 545).
132. Cf. *Amarakośa*, III.171.
133. Cf. *Medinīkośa*, 17.261.
134. Cf. Anekārthasaṁgraha, śl. 265.
135. Cf. *Orientalia Neerlandica*, p. 351.
136. Cf. *M. Bh.*, Ṣabhā, 58-9.
137. See his gloss on the above text.
138. Cf. *M. Bh.*, Vana, 13-13.
139. Cf. *ibid.*, Drona, 130-20.
140. Cf. *ibid.*, Karṇa, 74-15.
141. Cf. *AV*, XIV. 1-38.
142. Cf. *ṚV*, VIII-81-1, XI 106-3.
143. Cf. *YS*, II-199.
144. See *Mitākṣara*, on *YS*, II-199.
145. Cf. *Aṣṭādhyāyī*, III-3-70.
146. Cf. *Amarakośa*, II-751.
147. Cf. *M. Bh.*, Sabhā, 59-8.
148. Cf. *ibid.*, 56-3.
149. See his gloss on the above text.
150. Cf. *M.Bh.*, Droṇa, 130-20.
151. See his gloss on *M.Bh.*, Sabhā, 76-24.
152. *Orientalia Neerlandica*, p. 357.
153. Cf. *Das Würfelspiel in alten Indien*, 49, 50.
154. Cf. *M.Bh., An Ethno. Study*, p. 243f.
155. See his gloss on *TS*, I-8-16.
156. *M.Bh., An Ethno. Study*, p. 243.
157. Cf. *ASS*, Vol.19; *BhāSS*, V-12.
158. Cf. *ṚV*, X-34-8 &12.
159. Cf. *ibid.*, 8.

160. Cf. *Vedic Index.* vol. I, p. 4f.
161. See his gloss on *Ṛ.V,* X.34-8.
162. Cf. *Das Würfelspiel in alten Indien,* 25.
163. Cf. *ASS,* XVIII-19-1; V-19-4; MSS, I-5-7.
164. Cf. *M. Bh.*, Vana, 34-4.
165. See his gloss on the above text.
166. See Zimmer, *Altindisches Leben,* 284.
167. Cf. *Das Würfelspiel in alten Indien,* 25ff.
168. Cf. *M. Bh.*, Vana, 72-76.
169. Cf. *Orientalia Neerlandica,* p. 350f.
170. Cf. *M. Bh., An Ethno. Study,* p. 243f.
171. Cf. *AV,* VII-114-5.
172. Cf. *Orientalia Neerlandica,* p. 360.
173. Cf. *Ṛ.V,* X-34-2.
174. See *Dighanikāya,* XXXIII. 27.
175. Cf. *Orientalia Neerlandica,* p. 361.
176. Cf. *M. Bh.*, Sabhā, 59-7.
177. See his gloss on the above text.
178. Cf. *Orientalia Neerlandica,* p. 362.
179. The following texts refer to *tretā* and *dvāpara:*
    a. *Paippalāda,* I-49-4.
    b. *M.Bh.*, Virāṭa, 50-24.
    c. *Sutrakritāṅga,* I-2-3-23.
    d. *Mṛcchakaṭika,* Act II, ś1. 9.
180. Cf. *Mahābhaṣya on Pāṇini,* II-1-10.
181. *JRAS,* July 1980, p. 823ff.
182. Cf. *Orientalia Neerlandica,* p. 362.
183. Cf. *Kāśikā on Pāṇini,* II-1-10.
184. Cf. *Aṣṭādhyāyī,* II-11-10
185. Cf. *Mahābhāṣya on Pāṇini,* II-1-10.
186. Cf. *DKC,* Ucchvāsa, II, p. 76.
187. Cf. *Jayamaṅgalā on Kāmasūtra,* I-3-14.
188. Cf. *Kāmasūtra,* I-3-14.
189. Cf. *PIHC,* 1939 (Third Session, Calcutta), p. 241f.
190. Cf. *NS,* XVI.3.
191. Cf. *M.Bh.*, Sabhā, 59-4.
192. Cf. *ibid,* Sabhā. 21.
193. Cf. *KSS,* CXXI, 90.
194. Ch. *Ibid.*, CXXI. 82.
195. Cf. *Brahmapurāṇa,* Ch. 201, śls. 1-23.
196. *Ibid.*, 201-20 & 22.
197. Cf. *M.Bh.*, Sabhā, 68, 24.
198. Cf. *ibid.*, 33.
199. Cf.KSS, LXXIV, 48.
200. Cf. *M.bh.*, Sabhā, 67-50.

202. Cf. *ibid.*, Sabhā, 68, 9.
203. Cf. *History of Dharmaśāstra*, vol, III, p. 542.
204. Cf *M.Bh.*, Udyoga, II. 9-11.
205. Cf. *Mṛcch.*, Act II. p. 76.
206. See *Jātaka* No. 91.
207. Cf. *NS*, XVI. 5.
208. See *M.Bh.*, Sabhā, 67.47.
209. See the *Gambler's Hymn*, stanza 4.
210. *M.Bh.*, Sabhā, 66.4.
211. *Ibid.*, 71, 19.
212. Cf. *ibid.*, 67,5a.
213. Cf. *ibid.*, Sabhā, 67. 5b.
214. *Ibid.*, 67.7.
215. Cf. *ibid.*, 48-49.
216. Cf. *ibid.*, 68.1.
217. Cf. *ibid.*, Sabhā, 68, 3b, 4b.
218. Cf. *ibid*, 20 & 21.
219. Cf. *ibid*, 23 & 24.
220. Cf. *ibid.*, 68, 32.
221. Cf. *ibid.*, 35.
222. Cf. *ibid.*, Vana, 61. 3-5.
223. Cf. *KSS*, LXXIV, 80-81.
224. Cf. *M.Bh.*, Sabhā, 68.38.
225. Cf. *ibid.*, 39.
226. Cf. *ibid.*, 47.
227. Cf. *Introduction to Sabhāparvan* (A Critical Edition), Bhandarkar Oriental Research Institute, 1944, p. xxix.
228. Cf. *JOR*, Vol. XVIII, part III, 1951, pp. 170-178.
229. Cf. *AIOC*, 1961 (21st Conference at Srinagar), p. 14.
230. Cf. *M.Bh.*, Vana, 61-14.
231. Cf. *ibid.*, 16.
232. Cf. *KSS*.

APPENDIX TWO

A TYPE OF SEDENTARY GAME IN THE PUNJAB*

HEM CHANDRA DAS GUPTA

In the year 1919 I had an occasion to visit the Chor peak in the neighbourhood of Simla and in course of the march from Phagu to the bank of the river Giri, I came across a square drawn on a rock surface, the square being divided into a number of smaller squares by means of lines as shown

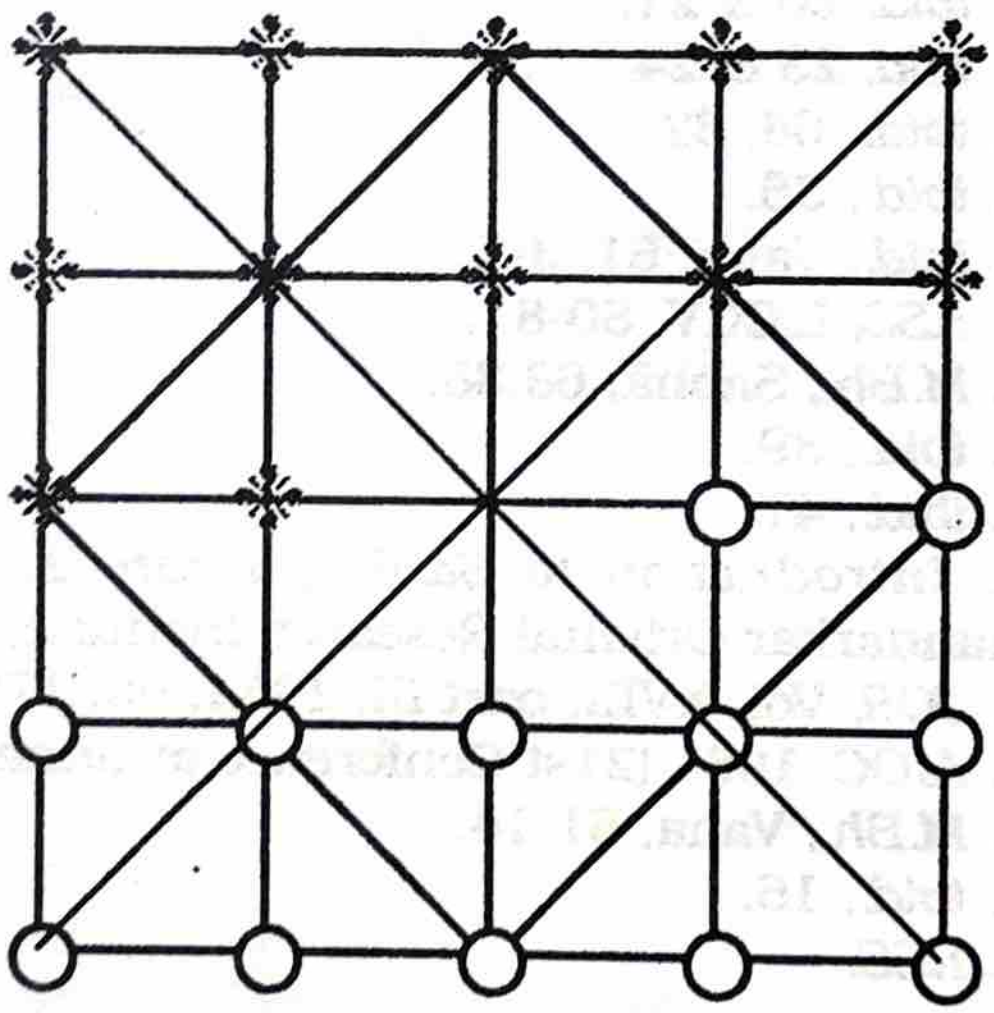

Fig. 1

in the following figure. On enquiry I came to learn that the figure was used for a particular type of sedentary game. According to the rules of the game two persons are necessary for playing it and the players are to provide themselves with twenty-four pieces of small stones or gravels of two different descriptions so that they can be easily-recognised.

The diagram (Fig. 1) shows that there are twenty-five points where two or more straight lines have met. These points may be called cross-points (Kruis-punten). Each of these cross-points, with the exception of the central one, has got a playing piece set on it. The move begins after the completion of this

* This article was published in Modern Review, March, 1923, pp. 510-513.

arrangement and when a player has one of his own playing pieces set next to one of his opponent's in such a way that the next cross-point in the same right line is vacant, the former's piece can jump over the latter's one, occupy the empty cross-point and the former player takes away the piece belonging to the latter. The player who can, in this way, capture all the pieces belonging to his adversary is declared to be the winner of the game. The game is not confined to the hills, but, as I could gather through the kindness of my friend Mr. Shiva Raj, it is also found in the Punjab plains and goes by the name of *bára guti* (twelve ballets), the name being evidently derived from the fact that each player has to provide himself with twelve ballets.

As far as I have been able to ascertain very little has been published dealing with the different types of the sedentary games of this country. In the year 1907 a very interesting article was published by Mr. Binodeswar Das-Gupta[1] in which description was given of the different types of games prevalent in Vikrampur, in Eastern Bengal. A reference to this paper shows that there is one game named Mangal-pátá[2] with which the Punjab game has a great similarity, but there are two main points in which the two games differ. In the first place, the diagram employed for Mangal-pátá has two triangles on the sides of the square and cross-points are produced in these triangles and these cross-points are filled up with the playing pieces. In the second place, the cross-points on the central horizontal line are all kept empty when the game is started. This type of diagram is also used in Behar.

Sometime ago Edw. Jacobson published a paper dealing, among other things, with the games prevalent at Simaloer, the most northern of the islands situated along the west coast of Sumatra. In this paper the author has described a game known as *Saloel*[3] which agrees with the Punjab game in having only the central cross-point vacant. In this game, however, the square has two triangles on the opposite sides as in the Bengal game of *Mangal-pátá*, but the number of dividing lines is much greater and there are altogether ninety-three cross-points and the play is carried on with pieces of two different kinds, the number of each kind being forty-six. According to Jacobson, the play is of Malayan origin and it agrees very much with the game of draughts. A little consideration will show that there is

an important difference between a game like *Saloel* and the game of draughts. In the latter the pieces with which the play is carried on are all placed on the squares while in the game of the former type these pieces are placed on the cross-points. Jacobson also described in this paper[4] a game called *rimoeor tiger play* locally in which also the pieces, with which the game is carried on, are placed on the cross-points. In parts of India there is also prevalent a type of tiger play the diagram of which recalls that of *rimoe* and in which also the pieces are placed on the cross-points. This game has been compared with the fox and geese game but in this case also there is the difference that the pieces are placed on the squares and not on the cross-ponts, though in one type of the fox and geese game that is played on a solitaire board[5] the pieces are placed on the cross-points. According to Jacobson these games are of Malayan origin, but in view of the fact of an ancient colonisation of Sumatra and Java by the Indians, in which, as it was pointed out by Dr. Bhandarkar,[6] the Hindus from Northern India also had some share and of the prevalence of types of sedentary games, at least in parts of northern India, in which the pieces are placed on the cross-points, whether these kinds of game were not originally carried to these islands from India is a question, which I think, is worthy of being investigated by the students of ethnology.

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1 Quarterly Journal of the Bangiya Sahitya Parisad, Vol. 14, pp. 214-245 (1314 B.S.).

2 According to Mr. Das-Gupta (*op.cit.* p. 240) the name of the game is derived from Moghal-Pathan and it is supposed to represent the strife between the Moghals and the Pathans and hence the play is not of very old origin. Mr. Basanta Ranjan Roy, Lecturer on Bengali in the Calcutta University, informs me that the word *pátá* may be derived from Prakrita *patta*=a plank. I think that the name of the game had its origin in the fact that the diagram used for the game was drawn on a piece of plank and that it was usually played during auspicious days, i.e., holidays or at auspicious places, i.e., holy places. It was only when the original interpretation came to be forgotten that the name of the game began to be associated with the fight between the Moghals and the Pathans. The name possibly originally meant *auspicious plank or board.*

3 Tijds. v. Ind. taal,-land-en volkenkunde Deel 58, pp. 10-11 (1917).

4 *Op.cit.*, pp. 8-10. According to the writer of this paper the diagram used for the play is cut in the floor planks of many houses and most *Soeraoes, i.e.*, houses where instructions are given regarding the mode of serving God.

5 Cassell's Book of Sports and Pastimes, p. 393.

6 Journ., Bomb. Br. R.A.S., Vol. 17, Pt. 2, pp. 7-8.

LIST OF CONTRIBUTORS

Jones, Sir William (b. September 28, 1746 - d. April 27, 1794): Born in London and died in Calcutta, before he could complete his 48th year of age. He studied in Harrow and Oxford and graduated in 1768; he became M.A. in 1773. He was a finished Latin and Greek scholar and had learnt French, German, Italian, Spanish, Portuguese, Arabic, Persian and Sanskrit. He acquired some knowledge on Turkish also. In March, 1783, Jones obtained his much coveted appointment to a judgeship of the Supreme Court of Judicature in Calcutta. He was Knighted at the same time. In April, 1783 he got married and set sail for India, arriving in Calcutta in September 1783. He joined his official duties in December, 1783. In January 15,1784, in collaboration with Charles Wilkins founded The Asiatic Society at the Grand Jury Room of Calcutta Supreme Court, in the presence of 30 distinguished British people resident in Calcutta. He became the first President of the Society with Sir Warren Hastings its Patron. In his Third Annual Discov se before the Asiatic Society on February 2, 1986, Jones initiated a new field of human science, that of Comparative Philology, or Linguistics. Sir William Jones, the poet and the literary man, and the judge and jurist, and the orientalist and visionery passed away even before 11 years of his stay in India. The article of Sir William Jones included in this volume was originally published as,

On the Indian Game of Chess, The Asiatick Researches, Vol. II, 1790, pp. 159-165.

Cox, Captain Hiram : Cox's Bazar in Bangladesh was named after Captain Hiram Cox, who was sent on a mission to the Court of Ava by Lord Amherst, about 1820, shortly before the first Burmese War. He wrote an account of this mission, published in London in 1821, under the title of "Journal of a Residence in the Burman Empire, and more particularly at the Court of Amarapoorah." The article of Captain Hiram Cox included in this volume was originally published as,

On the Burmha Game of Chess; compared with the Indian, Chinese, and Persian Game of the same denomination, *Asiatick Researches*, VII, 1801, pp. 486-510.

Raverty, Major H.G. (b. May 31, 1825 - d. October 20, 1906); Henry George Raverty was educated at Falmouth and Penzance. Entered East India Company's 3rd Bombay Infantry in 1843. Became Major in 1863 and retired in 1864. Participated in

the Seize of Multan (1848), Punjab Campaign (1849-50) etc. He was highly proficient in Oriental Languages and wrote a Pushtoo Grammar (1855), a thesauraus of Hiridustani-English technical terms (1859), Pushtoo Prose and Poetical Selections, Pushtoo-English Dictionary, Afghan Poetry 16th to 19th century with English translation, Aesop's fables in Pushtoo, Translation of Tabakat-i-Nasiri and Notes on Afghanistan and Beluchistan (1888). He wrote numerous articles on geography, history, ethnology in the Journal of the Asiatic Society of Bengal (1854-1905). Died at Grampound Road between St. Austel and Truro on October 20, 1906 at the ripe age of 81.

The article of Major H.G. Raverty included in this volume was originally published as.

The invention of Chess and Backgammon, Journal of the Asiatic Society, Vol. LXXI (1), 1902, pp. 47-60.

Humphries, E. De. M ; A civil servent who was appointed as the Sub-divisicnal Officer at Karwi Sub-division at IJ.P. in 1904 Submitted an inspection report on Mauza Gidarah, Pargana Karwi, the extract of which was published in the Journal of the Asiatic Society.

The article of E. DE. M. Humphries included in this volume was originally published as,

Notes on 'Pachesi' and similar games, as played in the Karwi Sub-division, United Provinces, JL-1906- NS : II, 117-127.

Shastri, Mm. Haraprasad (b. December 6, 1853 - d. November 17, 1931): Bom at Naihati, a few miles from Calcutta, in a Brahmin (RadhI) family. Early education in 'tolṛ thereafter in Sanskrit College of Calcutta. Completed his M.A. in Sanskrit from Calcutta University in 1877 and the title 'Shastri' was conferred upon him on the same year. Joined Sanskrit College, Calcutta as a teacher on 1883; became Principal of the College on 1900; retired at 1908. He was drawn to the studies of Orientalism by Raja Rajendralala Mitra and became closely associated with the Asiatic Society of Bengal and Bangiya Sahitya Parishad. He was the President of the Asiatic Society (1919-20 and 1920- 21) and prepared volumes of Descriptive Catalogues of Sanskrit and Vernacular Mss. in the possession of the Society. Published about 50 articles in different issues of the Journals & Proceedings of the Asiatic Society.

Note on Vlsnupur Circular Cards, JL- 1895-LXIV(I): 284-285.

Second note on Visnupur Circular Cards. Year Book-1895.

Das Gupta, Hem Chandra (b. 1878-d. January 1, 1933) : One of the pioneers of Geological Studies in India. First Indian full-time Professor of Geology at Presidency College. Founder of Geological, Mining and Metallurgical Society and Geological Institute. Elected President at the Geological Session of Indian Science Congress at 1928. He also wrote research papers in anthropology. He had intense interest in Folk-traditions of our country and wrote extensively on the study of sedentary games. (See also Sedentary Games of India, p. 108).
Articles of Hem Chandra Das Gupta included in this volume were originally published as,

Notes on a type of sedentary game prevalent in many parts of India, JIĀ1923-NS : XIX : 71-74
A few types of sedentary games prevalent in the Central Provinces, JL-1924-NS : XX : 165-169.
A few types of Indian Sedentary Games, JL-1926- NS: XXII : 211-213.
A few types of sedentary games prevalent in the Punjab, JLr 1926-NS : XXII : 143-148.
Two types of sedentary games prevalent in British Garhwal, JL-1927-NS : XXIV : 367-369.
On a type of sedentary game prevalent in Shahpur, the Punjab, JL-1930-NS : XXVI : 411-412.
On a type of sedentary game known as Pretoa, JLr 1931-NS : XXVII: 209-210.
Appendix 2 : A type of sedentary game in the Punjab, Modern Review, March, 1923, pp. 510-513.

Datta, Jatindra Mohan (b. 1894 - d. September 24, 1975) Hailed from renowned Datta-family of Hatkhola, Calcutta. Completed M.Sc., B.L. and B.A. degree in Economics. Joined politics in 1920 under the influence of Surendra Nath Banerjee. Joined Hindu Mahasabha in 1937 as Secretary of the organisation. Worked on census in Bengal at 1941. Awarded 'Padmasree' in 1975. A resident of Panihati, few miles north of Calcutta, Shri Datta wrote many articles in different periodicals and dailies; he had a pen-name called 'Yam Datta'.
Articles of Jatindra Mohan Datta included in this volume was originally published as,

A few types of sedentary games of Lower Bengal, Journal of the Asiatic Society, NS-XXIX, 1933, pp. 167-170.

On a type of sedentary game of Bengal, JLr 1934- NS: XXX: 17-18.
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Hora, Sunder Lai (b. May 2, 1896-d. December 8, 1955): Born at Hafizabad, Punjab; early education in Anglo- Sanskrit high school at Jullunder; then in Government College at Lahore, S.L. Hora was awarded Malagan Gold Medal and the Purse of the Punjab University when he completed his M.Sc in Zoology in 1919. On the same year he was recruited in Zoological Survey of India as a research scholar and came under the influence of his Zoological 'guru', Dr. Nelson Annandale, the then Director of ZSI. Hora obtained his D.Sc. from Punjab University in 1922. He was an outstanding scholar of international repute and served many high offices. He had almost 400 publications to his credit in different journals of India and abroad. He was attached to the Asiatic Society since 1921. It was in December 5, 1955, while presiding over a meeting of the Society, he suddenly fell ill and collapsed. He preferred dying in harness and his wish was fulfilled. A special number of JAS was dedicated to the memory of Dr. S.L. Hora (Journal of the Asiatic Society, Vol. XXII, No. 1, 1956).
Articles of Dr. Sunder Lai Hora included in this volume were originally published as,
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Das Gupta, Charu Chandra : M.A. from Calcutta University, became Premchand Roychand Scholar. Did his doctoral research from Cambridge University. Head of the department of Ancient Indian History, Sanskrit College, Calcutta University, Prizeman and
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A type of sedentary games prevalent in the United Provinces of Agra and Oudh, JLr 1938-3S : IV(L) : 121-122.

A few types of sedentary games prevalent in the Khasi and Jaintia Hills district in Assam, JLr 1942- 3S : VIII(L) : 151-155.

Bhatta, C. Panduranga : Born at Charanabailu, Karnataka State in 1952. He took B.A. degree in 1973 and M.A. in 1975 from the Universities of Mysore and Madras respectively. He was awarded the Ph.D. degree by the University of Madras in 1982. He has secured Dr. M.C. Nanjunda Rao Gold Medal in 1975 awarded by the R.K.M. Vivekananda College, Madras. The National Merit Scholarship was awarded to him during 1973-75. He has contributed research articles in Sanskrit and English to Brahma Vidya, Samkranti, Sudharma etc. He has been working as an Assistant Professor of Sanskrit in the R.K.M. Vivekananda College, Madras since 1976.

The article of C. Panduranga Bhatta included in this volume was originally published as.

Analysis of the Game of Dice, Dice-Play in Sanskrit Literature, Ch. 5, pp. 64-106

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Many acknowledged works to his credit. This discourse of Professor Suniti Kumar Chatterji was submitted in the Ordinary Monthly Meeting of the Asiatic Society, on July, 1936.

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He was known for his accurate observations. In his remarks on the Daśāvatār cards even, we could observe the traits of Agharkar.

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Hobbs, H. (1964 - 1956) : Harry Hobbs arrived at Calcutta from England as a Piano tuner in 1883. Afterwards he founded a company H. Hobbs and Co. at 4, Esplanade East, before it was shifted to 9, Esplanade East and then to 21, Old Court House Street.

He wrote a number of newspaper articles and books on Calcutta life.

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SEDENTARY GAMES OF INDIA

In 1790, the second volume of *The Asiatick Researches* was published. It was aweinspiring, like its earlier volume and the first article of this anthology was printed there under the title and author's name - *The Indian Game of Chess* by *The President*. And the story began ...

Only six years before, that was in 1784, thirty Europeans, mostly professionals met in the Grand Jury Room of the then Supreme Court of Calcutta decided to form an academic institution. They also decided the aim and objective of the body – 'to establish but one rule, namely, to have no rules at all.' In the first ever discourse of this oldest academic institute of the country, the President of the Society Sir William Jones narrated its aim and the subjects of study, 'If now it be asked, what are the intended objects of our inquiries within these spacious limits, we answer, *MAN and NATURE; whatever is performed by the one, or produced by the other.*'

Accordingly the study of Board Games came to fore within a few years and continued in *The Asiatick Researches, Journal of the Asiatic Society* a[illegible] *Book of the Asiatic Society*, for almost t[illegible] and thirty years.

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